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# PART A IONOSPHERIC DATA

ISSUED MAY 1962

U. S. DEPARTMENT OF COMMERCE NATIONAL BUREAU OF STANDARDS CENTRAL RADIO PROPAGATION LABORATORY BOULDER, COLORADO



CRPL-F 213 PART A

# NATIONAL BUREAU OF STANDARDS CENTRAL RADIO PROPAGATION LABORATORY 22 May 1962 BOULDER, COLORADO

Issued

# IONOSPHERIC DATA

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#### IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and dissemination of ionospheric and related geophysical data. While originally a by-product of the collection of data by the CRPL for use in radio propagation studies, the CRPL-F series bulletins, Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," have provided useful service by collecting and making available a wide variety of data in convenient form for use in research, not only on radio propagation and the ionosphere, but also on a wide variety of geophysical problems. Beginning with CRPL-F 211, Part A, "Ionospheric Data," a number of changes have been made in the tables of ionospheric data which, by providing more information, should increase their usefulness.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into median determination (count) for all ionospheric characteristics listed. Also, the upper and lower quartile values, indicated by UQ and LQ in the tables, are listed for foF2, h'F2, h'F, and (M3000)F2. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods, which, by improving the speed and efficiency of preparation, permit earlier publication of the data.

Graphs of critical frequencies and (M3000)F2 will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. This change was necessary to provide space for the enlarged tables. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are still available from the CRPL and the IGY World Data Center A for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F-series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject to some valid criticism for tampering with original data. The tables and graphs now show the ionospheric data just as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data now rests entirely with the originator.

Gaps in the tables when data normally might be expected indicate the data were not provided by the originator. Following the recommendation of the World-Wide Soundings Committee, only values of median foEs are listed. In the few cases where fEs is still reported instead of foEs, the data will not be printed. Data will appear in the F-series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1961, the succeeding values being based on provisional data.

# Smoothed Observed Zurich Sunspot Number

| Month        | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct.        | Nov. | Dec. |
|--------------|------|------|------|------|-----|------|------|------|------|-------------|------|------|
|              |      |      |      |      |     |      |      |      |      |             |      |      |
| 1954         |      |      |      | 3    | 4   | 4    | 5    | 7    | 8    | 8           | 9    | 12   |
| 1955         | 14   | 16   | 19   | 23   | 29  | 35   | 40   | 46   | 55   | 64          | 73   | 81   |
| <b>19</b> 56 | 89   | 98   | 109  | 119  | 127 | 137  | 146  | 150  | 151  | <b>1</b> 56 | 160  | 164  |
| 1957         | 170  | 172  | 174  | 181  | 186 | 188  | 191  | 194  | 197  | 200         | 201  | 200  |
| 1958         | 199  | 201  | 201  | 197  | 191 | 187  | 185  | 185  | 184  | 182         | 181  | 180  |
| 1959         | 179  | 177  | 174  | 169  | 165 | 161  | 156  | 151  | 146  | 141         | 137  | 132  |
| 1960         | 129  | 125  | 122  | 120  | 117 | 114  | 109  | 102  | 98   | 93          | 88   | 84   |
| 1961         | 80   | 75   | 69   | 64   | 60  | 56   | 53   | 52   | 52   | 51          |      |      |
| 1962         |      |      |      |      |     |      |      |      |      |             |      |      |
|              |      |      |      |      |     |      |      |      |      |             |      |      |

#### Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle

foFl, FoE - - - Hundredths of a megacycle

h'F2, h'F, h'E - Kilometers

(M3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median

CNT - Count

UQ - Upper Quartile

LQ - Lower Quartile

### WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 100 and figures 1 to 100 were assembled by the Central Radio Propagation Laboratory for analysis and correlation, incidental to CRPL prediction of radio propagation conditions. The data are median values unless otherwise indicated. The following are the sources of the data in this issue:

Republica Argentina, Ministerio de Marina: Buenos Aires, Argentina Decepcion I.

Commonwealth of Australia, Department of the Interior: Macquarie I.

Commonwealth of Australia, Ionospheric Prediction Service of the Commonwealth Observatory:
Canberra, Australia

Belgian Royal Meteorological Institute: Lwiro (Central African Institute for Scientific Research)

Universidad Mayor de San Andres: La Paz, Bolivia

British Department of Scientific and Industrial Research, Radio Research Board:
Falkland Is.

Halley Bay Inverness, Scotland

Defence Research Board, Canada: Alert, Canada Clyde, Baffin I.

Universidad de Concepcion: Concepcion, Chile

Danish National Committee of URSI: Godhavn, Greenland Narssarssuaq, Greenland

French National Center for Telecommunications Studies:
Casablanca, Morocco
Dakar, French West Africa
Djibouti, French Somaliland
Kerguelen I.
Poitiers, France
Tamanrasset, French West Africa
Tananarive, Madagascar

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Institute for Ionospheric Research, Lindau Uber Northeim, Hannover, Germany:
     Tsumeb, South West Africa
Ionospheric Institute, Breisach, Germany:
     Freiburg, Germany
The Royal Netherlands Meteorological Institute:
     Paramaribo, Surinam
Icelandic Post and Telegraph Administration:
     Reykjavik, Iceland
Indian Council of Scientific and Industrial Research, Radio Research
   Committee, New Delhi, India:
     Ahmedabad (Physical Research Laboratory)
     Bombay (All India Radio)
     Calcutta (Institute of Radio Physics and Electronics)
     Delhi (All India Radio)
     Kodaikanal (India Meteorological Department)
     Madras (All India Radio)
     Tiruchy (All India Radio)
     Trivandrum (All India Radio)
Christchurch Geophysical Observatory, New Zealand Department of
   Scientific and Industrial Research:
     Campbell I.
     Cape Hallett (Adare), Antarctica
Telecommunication Administration, Oslo, Norway:
     Svalbard, Norway
Manila Observatory:
     Baguio, P. I.
Royal Board of Swedish Telegraphs, Radio Department, Stockholm, Sweden:
     Lulea, Sweden
United States Army Signal Corps:
     Grand Bahama T.
National Bureau of Standards (Central Radio Propagation Laboratory):
     Anchorage, Alaska
     Boulder, Colorado
     Byrd Station, Antarctica
     Fairbanks (College), Alaska (Geophysical Institute of the University
        of Alaska)
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Huancayo, Peru (Instituto Geofisico de Huancayo)

Maui, Hawaii

Point Barrow, Alaska Pole Station, Antarctica

#### TABULATIONS OF ELECTRON DENSITY DATA

Reduction of hourly ionospheric vertical soundings to electron density profiles has become a part of the systematic ionospheric data program of the Central Radio Propagation Laboratory, National Bureau of Standards. Scalings of ionograms for this purpose are being provided by ionosphere stations operated by several stations associated with CRPL. For the present, the hourly profile data from one CRPL station, Puerto Rico, are appearing in the monthly CRPL-F Reports, Part A. The very considerable task of scaling the ionograms for this purpose is being undertaken by T. R. Gilliland, Engineer in Charge, Puerto Rico Ionosphere Sounding Station; the computations are performed at the NBS Boulder Laboratories by a group headed by J. W. Wright. Basic conversion of virtual to true heights uses the well-known matrix method developed by K. G. Budden of the Cavendish Laboratory, Cambridge University, programmed by Dr. H. H. Howe for a CDC-1604 computer.

The tabulations provide the following basic electron density profile data for each hour of each day of the month:

| Quantity                | <u>Units</u>  | Remarks   |
|-------------------------|---|---|
| Electron<br>Density (N) | $x10^3 = electrons/cm^3$                                  | Body of table; given at each 10 km of height.   |
| NMAX                    | $x10^3 = electrons/cm^3$                                  | Always the highest value of N at each hour. To maintain this rule, the electron density at the next 10 km increment above HMAX is always given as exactly equal to NMAX (unless HMAX coincides with a 10 km level). |
| QUALification<br>KP     | (Alphabetic)  | A standard scaling letter qualifying the observation when necessary. The standard Kp magnetic index, to one digit.  |
| HMIN                    | Kilometers  | The height of zero or very low electron density, obtained by linear extrapolation of the electron density vs. height curve.   |
| SCAT                    | Kilometers  | One half of the half-thickness of the parabola best fitting the upper portion of the F region profile. Approximates the scale height near the level HMAX.   |
| HMAX                    | Kilometers  | The height of maximum electron density, determined by fitting a parabola to the upper portion of the profile.   |
| SHMAX                   | $x10^{10} = \frac{\text{electrons/cm}^2}{\text{column.}}$ | Obtained by integration of the profile between the limits HMIN and HMAX.  |

Tabulations of the average electron densities each hour, at each 10 km level, for the quiet ionosphere, are also given. These averages include the profiles obtained when the magnetic character figure Kp is 4+ or less. The number of profiles entering the average for each hour is given by CNT. The other parameters of the layer, HMIN, SCAT, HMAX, SHMAX, and the mean value of Kp are given for each hour.

Before the averaging process, the individual profiles are extrapolated above HMAX by a Chapman distribution of 100 km scale height. This assumed model seems to agree well with the few published measurements dealing with the topside profile of the F-region.\* Extrapolation is necessary in order to calculate homogeneous averages near HMAX and the average profiles are, in fact, given up to 950 km. Also given are the average estimated integrated electron densities to infinity, SHINF (same units as SHMAX); this is an approximation to the total electron content in a column of the ionosphere.

<sup>\*</sup>See Wright, J. W. "A Model of the F-Region Above HMAX F2" J.Geophys.Res. V.65, pp. 185-191.

| CLECTRON OFFICIAL | ELECTRON OFHERTY |
|-------------------|------------------|

| KM 330   | RAMEY   | AFB,   | PUERTO  | RE   |  |  |   |   | 50 W  |  |  | 1 JAN | 1962 | RAMEY   | AF8, | PUERT  | 0 R1C   | 0   |   |      |      | 60 W  |   | 1   | JAN  | 1962  |
|--|---|--|---|--|--|--|---|---|---|--|--|-------|------|---|------|--|---|---|---|------|------|---|---|---|--|---|
| HMIN   221   256   251   226   211   197   197   110   110   109   109   110   109   100   110   209   217   214   209   217   218   214 | TIME  | 0000   | 0100  | 0200   | 0300   | 0400   | 0500  | 0600  | 0700  | 0800   | 0900   | 1000  | 1100 | TIME  | 1200 | 1300   | 1400  | 1500  | 1600  | 1700 | 1800 | 1900  | 2000  | 2100  | 2200   | 2300  |
| 130 28-7 72-3 108 110 12-4 36-6 12-4 12-4 120 26-0 61-9 91-1   | Q, KP HM1N SCAT | A3<br>221<br>27-4<br>280<br>82<br>25<br>225<br>217<br>194<br>152<br>91-7<br>39-1 | A3<br>256<br>35.8<br>323<br>100<br>222<br>221<br>214<br>198<br>172<br>132<br>78.3 | A1<br>251<br>35.7<br>323<br>112<br>235<br>235<br>228<br>211<br>186<br>152<br>109 | 1<br>226<br>31.9<br>290<br>103<br>247<br>247<br>241<br>222<br>192<br>144<br>79.1 | 1<br>211<br>27.6<br>266<br>69<br>190<br>188<br>173<br>146<br>104 | 1<br>197<br>44.3<br>296<br>99<br>162<br>161<br>157<br>148<br>136<br>118<br>95.9<br>72.7<br>50.1<br>30.2 | 1<br>197<br>38-1<br>285<br>73<br>134<br>134<br>120<br>105<br>86-9<br>66-9<br>47-5<br>29-6 | 224<br>221<br>211<br>196<br>173<br>142<br>210<br>84.2<br>63.5<br>49.8<br>49.8<br>49.8<br>49.8<br>49.8<br>49.8<br>49.8 | 1100<br>32.5<br>245<br>307<br>515<br>511<br>486<br>436<br>365<br>290<br>024<br>172<br>133<br>107<br>70.9<br>90.9<br>81.0<br>81.0 | 1 109 31.2 242 459 842 841 811 739 603 445 136 118 108 108 108 |       |      | G,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>3100<br>2900<br>2800<br>2700<br>260<br>2500<br>2500<br>2200<br>2100<br>200<br>190<br>180<br>170<br>160<br>150<br>160<br>170 |      | 1<br>110<br>24-2<br>224<br>355<br>651<br>647<br>649<br>383<br>383<br>367<br>239<br>212<br>185<br>153 | 491<br>491<br>491<br>481<br>461<br>427<br>386<br>336<br>233<br>256<br>231<br>209<br>184<br>148<br>148 | 40<br>109<br>32.5<br>243<br>398<br>621<br>620<br>596<br>4460<br>362<br>228<br>218<br>173<br>155<br>127<br>102 | 40<br>34-9<br>249<br>385<br>591<br>580<br>545<br>486<br>404<br>319<br>2214<br>183<br>114<br>103<br>89-9 | AZ   |      | A2<br>209<br>30.6<br>266<br>123<br>311<br>309<br>291<br>256<br>206<br>128 | 3<br>217<br>35.0<br>293<br>114<br>235<br>235<br>227<br>208<br>183<br>150<br>108<br>57.9<br>19.9 | 3<br>214<br>34.4<br>281<br>106<br>243<br>243<br>243<br>237<br>220<br>191<br>145<br>84.5 | 3<br>209<br>33.4<br>270<br>80<br>190<br>186<br>174<br>152<br>120<br>73.1 | 2<br>217<br>45.5<br>304<br>84<br>142<br>142<br>139<br>133<br>123<br>109<br>89.4<br>65.7<br>42.4 |

| ELE                         | ECTRON DENSITY                         | ELECTRON DENSITY   |
|-----------------------------|--|--|
| RAMEY AFB, PUERTO RICO      | 60 W 2 JAN 1962                        | RAMEY AFB, PUERTO RICO 60 W 2 JAN 1962                           |
| T1ME 0000 0100 0200 0300 04 | 400 0500 0600 0700 0800 0900 1000 1100 | TIME 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 |
| SHMAX 101 77 111 97 K       |  | O, KP A2 A2 A1 1 1 1 1 S1 1 0 0 0 0 0 0 0 0 0 0 0 0 0            |

| <br>00 | TDO | 14.0 | O.C. | MIC | 1 T |  |
|--------|-----|------|------|-----|-----|--|

#### ELECTRON DENSITY

| RAMEY  | AF8,                      | PUERTO  | R1C0                            | 1                       |            |                            |                                 | 0 W  |   | 3    | JAN                      | 1962  | RAMEY  | AF8,  | PUERT  | D RICI   | )  |  |   |      | 50 W              |                               |   | 3 JAN                         | 1962       |
|--|---------------------------|---|---------------------------------|-------------------------|------------|----------------------------|---------------------------------|------|---|------|--------------------------|---|--|---|--|--|--|--|---|------|-------------------|-------------------------------|---|-------------------------------|------------|
| TIME   | 0000                      | 0100  | 0200                            | 0300                    | 0400       | 0500                       | 0600                            | 0700 | 0800  | 0900 | 1000                     | 1100  | TIME   | 1200  | 1300   | 1400   | 1500   | 1600   | 1700  | 1800 | 1900              | 2000                          | 2100  | 2200                          | 2300       |
| 0, KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>330<br>320<br>310<br>300<br>290<br>280<br>270 | 209                       | 218<br>48.5<br>326<br>139<br>204<br>203<br>198<br>189<br>175<br>158 | F0<br>237<br>35.4<br>321<br>129 | 0<br>244<br>32.5<br>313 | 0<br>219   | 218<br>37.3<br>303         | A1<br>214<br>35.0<br>287<br>109 | S 1  | 1<br>110<br>32.2<br>249<br>323  | Al   | A1<br>109<br>27.8<br>226 | 109   | 0.kP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>MM<br>310<br>290<br>280<br>270<br>260<br>270 | AO<br>110   | A0<br>110<br>52.5<br>246   | 1<br>110<br>50.9<br>260<br>467   | A1<br>110<br>35.0<br>247   | 1<br>110<br>32.6<br>245  | 1<br>111<br>41.3<br>249<br>319  | S1   | 201               | 0<br>209<br>38.7<br>287<br>95 | 0<br>234<br>32.0<br>304<br>98<br>225<br>224 | 0<br>218<br>27.1<br>265<br>82 | 0 201      |
| 260<br>250<br>240<br>230<br>220<br>210<br>190<br>180<br>170<br>160<br>150<br>140<br>130        | 139<br>126<br>108<br>81.2 | 113<br>88.8<br>60.0<br>33.6<br>12.4                                 | 96.5<br>57.5                    | 85.0<br>32.2            | 269<br>242 | 154<br>120<br>83.8<br>44.6 | 200<br>166<br>121<br>71.8       |      | 562<br>550<br>513<br>443<br>348<br>263<br>198<br>151<br>120<br>98.3<br>86.6<br>79.7<br>63.5<br>52.4<br>12.4 |      |                          | 621<br>460<br>329<br>274<br>253<br>238<br>218<br>156<br>132 | 240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130       | 517<br>517<br>498<br>452<br>386<br>317<br>257<br>230<br>186<br>132<br>102 | 499<br>489<br>470<br>442<br>403<br>357<br>311<br>272<br>241<br>213<br>156<br>134 | 518<br>492<br>456<br>403<br>348<br>302<br>270<br>246<br>227<br>206<br>151<br>133<br>97.3 | 495<br>466<br>425<br>376<br>327<br>284<br>248<br>219<br>195<br>176<br>159<br>127<br>99.7 | 561<br>534<br>481<br>396<br>306<br>239<br>195<br>165<br>140<br>117<br>106<br>101<br>91.3 | 483<br>462<br>427<br>370<br>289<br>219<br>168<br>134<br>112<br>95.0<br>82.3<br>75.9 |      | 197<br>167<br>118 |                               | 28.0  | 192<br>112<br>30•1            | 182<br>167 |

|  |                              | 6   | LECTR                           | ON 06                           | ENSITY                       | 1                               |   |      |  |      |   |  |  |   | 6   | LECT   | RON OF  | NSIT | 1           |                          |                                   |   |                          |
|--|------------------------------|---|---------------------------------|---------------------------------|------------------------------|---------------------------------|---|------|--|------|---|--|--|---|---|--|---|------|-------------|--------------------------|-----------------------------------|---|--------------------------|
| RAMEY AFB, F   | PUERTO RI                    | C 0   |                                 |                                 | 6                            | 50 W                            |   | 4    | 4 JAN  | 1962 | RAMEY   | AF8,   | PUERT  | 0 R1C   | )   |  |   | 6    | 50 W        |                          |                                   | + JAN                                     | 1962                     |
| T1ME 0000  | 0100 020                     | 0 0300  | 0400                            | 0500                            | 0600                         | 0700                            | 0800  | 0900 | 1000   | 1100 | TIME  | 1200   | 1300   | 1400  | 1500  | 1600   | 1700  | 1800 | 1900        | 2000                     | 2100                              | 2200                                      | 2300                     |
|  | 243 25<br>45.4 37.<br>337 33 | 5 31.7<br>8 320<br>6 95                             |                                 | 36.0                            | 36.1                         | S1<br>110<br>34.1<br>251<br>137 | 23.6  |      | A0<br>110<br>23.0<br>225<br>302  |      | Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>290         | 23.9<br>229<br>325                                   | 109<br>30.6<br>233   |   | 246   | 33.9<br>241  | 247   |      | 30.7        | 208<br>39.2<br>279<br>68 | 33.4<br>282<br>64                 | 30.0<br>281<br>75                         |                          |
| 320<br>310<br>300 117<br>290 117<br>280 114<br>270 110 | 146 18<br>138 16<br>126 13   | 0 215<br>4 210<br>9 194<br>0 168<br>2 130<br>8 85.3 | 184<br>176<br>161<br>142<br>120 | 163<br>158<br>148<br>130<br>105 | 170<br>165<br>154<br>135     | 238                             |   |      |  |      | 270<br>260<br>250<br>240<br>230<br>220                      | 567<br>546   | 516<br>495   | 523<br>515<br>499<br>477                      | 630<br>563  | 591  | 482<br>477<br>449<br>401<br>329                                   |      | 141<br>91.1 | 140                      | 164<br>152<br>125<br>65.3<br>12.4 | 178<br>161<br>133<br>96.4<br>48.4<br>12.4 | 118<br>116<br>110<br>101 |
|  | 25.0                         | 12.4  |                                 |                                 | 82.7<br>57.3<br>32.6<br>12.4 | 238<br>233<br>216<br>192<br>161 | 449<br>420<br>353<br>265<br>196<br>151<br>116<br>94.0<br>80.3<br>73.9<br>67.9<br>51.3 |      | 619<br>612<br>555<br>438<br>300<br>232<br>206<br>181<br>153<br>131<br>115<br>103 |      | 200<br>190<br>180<br>170<br>160<br>150<br>140<br>130<br>120 | 382<br>309<br>263<br>238<br>222<br>195<br>138<br>127 | 378<br>316<br>275<br>249<br>230<br>204<br>166<br>133<br>87.1 | 298<br>267<br>246<br>229<br>213<br>196<br>151 | 357<br>283<br>238<br>210<br>189<br>171<br>160<br>139<br>111 | 359<br>267<br>209<br>173<br>149<br>131<br>120<br>114<br>91.1 | 239<br>168<br>126<br>96.6<br>78.0<br>68.0<br>62.2<br>59.1<br>57.3 |      | 12.4        | 12.4                     |                                   |   | 22.9                     |

| E | I E C | TRON | DENIS | 11 T Y |
|---|-------|------|-------|--------|

#### ELECTRON DENSITY

| RAMEY                                  | AF8,  | PUERT   | O RICO   | )   |                               |   | -   | 50 W |                                |   | NAL  | 1962                                   | RAMEY  | AF8,   | PUERT   | RICO   | )   |  |  | (   | 50 W   |   | 9   | 5 JAN  | 1962  |
|--|---|---|--|---|-------------------------------|---|---|------|--------------------------------|---|--|--|--|--|---|--|---|--|--|---|--|---|---|--|---|
| TIME                                   | 0000  | 0100  | 0200   | 0300  | 0400                          | 0500  | 0600  | 0700 | 0800                           | 0900  | 1000   | 1100                                   | TIME   | 1200   | 1300  | 1400   | 1500  | 1600   | 1700   | 1800  | 1900   | 2000  | 2100  | 2200   | 2300  |
|  | 0000<br>A0<br>217<br>49.9<br>311<br>73<br>112<br>112<br>111<br>107<br>101<br>92.9<br>81.8<br>68.2<br>51.1 | 0100<br>0 268<br>36.3<br>347<br>82<br>163<br>161<br>154<br>140<br>120<br>93.0<br>65.1<br>37.4<br>12.4 | 0200<br>0237<br>31.6<br>299<br>92<br>225<br>220<br>205<br>175<br>132<br>73.0<br>24.0 | 0300<br>0217<br>30-3<br>280<br>107<br>269<br>269<br>261<br>239<br>199 | 0<br>227<br>33.8<br>289<br>95 | A0<br>202<br>30°2<br>275<br>71<br>163<br>162<br>153<br>135<br>109<br>76°7<br>47°3 | 0600<br>A0<br>199<br>32.2<br>275<br>70<br>150<br>149<br>141<br>127<br>103 |      | 0<br>110<br>35.0<br>223<br>166 | 0900<br>0 109<br>35.3<br>234<br>229<br>358<br>357<br>344<br>318<br>226<br>179 | 1000<br>A0<br>109<br>25.5<br>222<br>275<br>456<br>456<br>456<br>426<br>375<br>316<br>265 | 1100<br>0<br>109<br>24.7<br>210<br>231 | TIME  Q, KP HMIN SCAT HMAX SHMAX SHMAX 310 310 300 290 280 270 260 250 240 230 210 200 190 180 170 160 150 | 1200<br>0 110<br>32.6<br>248<br>390<br>551<br>544<br>509<br>452<br>373<br>309<br>269<br>247<br>233<br>221<br>199 | 1300<br>A0<br>109<br>51.1<br>250<br>434<br>527<br>522<br>507<br>488<br>446<br>330<br>331<br>282<br>282<br>231<br>210<br>157 | 1400<br>A0<br>110<br>38.1<br>236<br>322<br>442<br>439<br>422<br>390<br>347<br>302<br>263<br>1206<br>184<br>165 | 1500<br>A0<br>110<br>35.7<br>237<br>313<br>446<br>442<br>422<br>382<br>243<br>334<br>286<br>243<br>3189<br>166<br>147 | 0 109<br>39.2<br>247<br>329<br>450<br>446<br>428<br>394<br>353<br>303<br>256<br>182<br>154<br>132<br>114 | A0<br>109<br>30.1<br>246<br>295<br>539<br>533<br>500<br>438<br>3247<br>185<br>144<br>119<br>97.5<br>80.8 | 1800<br>\$0<br>110<br>28.8<br>24.7<br>195<br>426<br>420<br>390<br>334<br>425<br>153<br>92.5<br>153<br>92.5<br>153<br>92.5<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7<br>27.7 | 1900<br>0 201<br>29.2 254<br>83<br>231<br>230<br>217<br>190<br>138 | 0<br>240<br>43.2<br>319<br>119<br>215<br>213<br>205<br>191<br>171<br>143<br>106<br>65.2 | 2100<br>A0<br>206<br>45.0<br>295<br>117<br>197<br>196<br>191<br>181<br>167<br>147<br>147<br>122<br>91.2<br>59.3 | 2200<br>A0<br>205<br>28.7<br>274<br>87<br>215<br>203<br>179<br>142<br>93.0<br>50.0 | 2300<br>A2<br>198<br>30.6<br>271<br>81<br>187<br>187<br>180<br>164<br>137<br>99.7 |
| 160<br>150<br>140<br>130<br>120<br>110 |   |   |  |   |                               |   |   |      | 83.3<br>69.3<br>48.9<br>44.1   | 106<br>96.4<br>91.3<br>88.2<br>85.8<br>33.3                                   | 175<br>144<br>127<br>112   |  | 130<br>120<br>110  | 123<br>118<br>12.4   |   | 107  | 95.9  | 90.5   | 64.5<br>60.3<br>12.4   | 24.3  |  |   |   |  |   |

|  |                          |                    |  |                                  | LECT                            | RON O   | ENSIT:       | 1    |      |      |       |      |  |      |       |   | 1                  | ELECT  | RON DE | NSIT | Y  |      |   |  |                                |
|--|--------------------------|--------------------|--|----------------------------------|---------------------------------|---|--------------|------|------|------|-------|------|--|------|-------|---|--------------------|--|--------|------|--|------|---|--|--------------------------------|
| RAMEY  | AF8,                     | PUERT              | RIC                                      | )                                |                                 |   |              | 50 W |      | 6    | 5 JAN | 1962 | RAMEY  | AF8, | PUERT | R1C   | )                  |  |        |      | 60 W   |      |   | NAL                                      | 1962                           |
| TIME   | 0000                     | 0100               | 0200                                     | 0300                             | 0400                            | 0500  | 0600         | 0700 | 0800 | 0900 | 1000  | 1100 | TIME   | 1200 | 1300  | 1400  | 1500               | 1600   | 1700   | 1800 | 1900   | 2000 | 2100                                      | 2200                                     | 2300                           |
| Q,KP<br>HM1N<br>SCAT<br>HMAXE<br>SHMAX<br>KM   |                          | 243<br>32.7<br>321 |  | 27.3<br>260                      | 0<br>199<br>46.9<br>277<br>87   | 41.4  | 36.6         | 51   | AO   | AO   | ΑO    | Α1   | Q,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM   | Αl   | Α1    | 36.0<br>257   | 110<br>28.3<br>250 | A1<br>109<br>27.2<br>232<br>322                                    |        | ΑO   | A0<br>199<br>47.1<br>267<br>82                         | 80   | 43.5<br>320                               | 30.7<br>299                              | F0<br>209<br>30.8<br>283<br>88 |
| 330<br>320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>220<br>210<br>200 | 212<br>199<br>177<br>149 |                    | 231<br>218<br>192<br>149<br>94.3<br>37.9 | 234<br>226<br>202<br>155<br>66.0 | 155<br>150<br>142<br>131<br>115 | 167<br>164<br>156<br>143<br>124<br>97.2<br>67.5<br>41.9 | 58.7<br>34.0 |      |      |      |       |      | 330<br>320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>240<br>210<br>200<br>190<br>180<br>170<br>160 |      |       | 591<br>586<br>559<br>510<br>435<br>351<br>288<br>224<br>207<br>194<br>180 |                    | 636<br>635<br>607<br>534<br>400<br>269<br>204<br>172<br>149<br>128 |        |      | 162<br>161<br>157<br>148<br>137<br>108<br>58.2<br>12.4 |      | 197<br>172<br>131<br>86.6<br>52.7<br>28.6 | 251<br>215<br>167<br>115<br>59.6<br>19.9 |                                |
|  |                          |                    |  |                                  |                                 |   |              |      |      |      |       |      | 130<br>120   |      |       | 134   | 126                | 95.3   |        |      |  |      |   |  |                                |

|   | ELECTRON DENSITY   |  | ELECTR  | ON DENSITY                         |
|---|--|--|---|------------------------------------|
| RAMEY AFB, PUERTO RICO  | 60 W   | 7 JAN 1962 RAMEY   | AFB, PUERTO RICO  | 60 W 7 JAN 1962                    |
| TIME 0000 0100 0200 030   | 0 0400 0500 0600 0700 0800   | 0900 1000 1100 TIME  | 1200 1300 1400 1500 1600  | 1700 1800 1900 2000 2100 2200 2300 |
| HMIN   222   251   219   20   20   20   20   21   35.8   44.9   25.   HMAXF   285   325   293   24   241   310   232   300   213   354   290   178   186   354   290   178   186   354   280   177   147   347   270   168   94.0   331   260   151   40.1   306   250   122   270   27   240   84.5   211   26   230   40.9   127   24   220   210   210   210   210   210   210   210   210   210   225   200   210   210   210   210   225   200   210   210   210   225   200   210   210   225   200   210   225   200   210   210   210   210   225   200   210   210   210   210   210   225   200   210 | 9 35.9 33.2 37.2 67.5 5 282 295 280 253 2 82 89 94 238 2 89 14 156 189 214 151 163 211 141 138 199 265 125 175 265 | 36-5 30-2 24-4 SCAT 247 251 235 HMAX   331 371 357 SHMAX   320 320 320 320 320 320 320 320 320 320 | 469 562<br>468 549<br>454 510<br>426 428<br>375 325<br>307 246<br>257 203<br>234 177<br>212 156 | 254                                |

|   |   |  |   |      | ELECT  | RON DI | ENS1T | Υ    |   |      |       |     |     |  |   |        |      |  | ELECTA   | ON DE | NSIT | Y                              |  |   |      |      |
|---|---|--|---|------|--|--------|-------|------|---|------|-------|-----|-----|--|---|--------|------|--|--|-------|------|--------------------------------|--|---|------|------|
| RAMEY   | AF8,  | PUERTO   | RICO  |      |  |        |       | 60 W |   |      | 8 JAN | 196 | 2   | RAMEY  | AF8,  | PUERTI | RIC  | D  |  |       |      | 50 W                           |  | 8   | JAN  | 1962 |
| TIME  | 0000  | 0100   | 0200  | 0300 | 0400   | 0500   | 0600  | 0700 | 0800  | 0900 | 1000  | 110 | 0.0 | TIME   | 1200  | 1300   | 1400 | 1500   | 1600   | 1700  | 1800 | 1900                           | 2000   | 2100  | 2200 | 2300 |
| G*KP<br>HMIN<br>SCAT<br>HMAXF<br>SHAX*<br>XM<br>3300<br>3200<br>290<br>270<br>2600<br>250<br>2400<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140 | 1<br>206<br>44.1<br>289<br>125<br>215<br>213<br>205<br>192<br>173<br>150<br>120<br>82.6 | 237<br>39.0<br>324<br>120<br>225<br>224<br>217<br>202<br>180 | F1<br>255<br>34.6<br>325<br>102<br>226<br>225<br>216<br>197<br>170<br>131<br>71.0 |      | 270<br>270<br>270<br>270<br>257<br>224<br>1125<br>44.2 |        |       | \$1  | A1<br>110<br>42.8<br>250<br>268<br>371<br>366<br>351<br>325<br>290<br>247<br>207<br>207<br>207<br>207<br>86.8<br>86.8 | A1   |       | А   |     | C, KP<br>HM1N<br>SCAT<br>HMAXF<br>5 HMAX<br>8 M<br>340<br>320<br>310<br>300<br>290<br>250<br>250<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150 | A2<br>108<br>32-4<br>214<br>242<br>390<br>389<br>389<br>284<br>219<br>196 | AZ     | Al   | 1<br>108<br>23.7<br>224<br>278<br>507<br>504<br>465<br>381<br>292<br>236<br>236<br>183<br>161<br>142 | 1<br>109<br>29.3<br>24.7<br>352<br>577<br>569<br>456<br>358<br>456<br>358<br>456<br>173<br>1756<br>117 | 40    | ДО   | A0<br>199<br>33.0<br>268<br>73 | AL<br>229<br>39.0<br>316<br>71<br>129<br>129<br>124<br>115 | 1<br>259<br>45.3<br>335<br>109<br>195<br>194<br>189<br>180<br>165<br>144<br>116<br>76.3 | F1   |      |
|   |   |  |   |      |  |        |       |      |   |      |       |     |     | 140<br>130<br>120  |   |        |      |  | 117<br>101<br>93.0   |       |      |                                |  |   |      |      |

| ELECTRON DENSITY | FLECTRON DENSI |
|------------------|----------------|

| RAMEY  | AF8,  | PUERTO  | RICC  |  |  |   |  | 50 W                            |  | ę  | NAL 6 | 1962               | RAME  | Y AF8.                                | PUER | TO R | R1C0 |  |                  |            |            | 60 W  |  |  | JAN  | 1962  |
|--|---|---|-------|--|--|---|--|---------------------------------|--|--|-------|--------------------|---|---------------------------------------|------|------|------|--|------------------|------------|------------|---|--|--|--|---|
| TIME   | 0000  | 0100  | 0200  | 0300   | 0400   | 0500  | 0600   | 0700                            | 0800   | 0900   | 1000  | 1100               | T 1 M   | 1200                                  | 1300 | 14   | 00   | 1500   | 1600             | 1700       | 1800       | 1900  | 2000   | 2100   | 2200   | 2300  |
| 71ME<br>Q,KP<br>HMINN<br>SCAT<br>HMAX<br>SHMAX<br>3200<br>3100<br>2900<br>2700<br>2600<br>2700<br>2400<br>2200<br>2100<br>2000<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900<br>1900 | F1<br>238<br>36.9<br>317<br>101<br>196<br>194<br>185<br>169<br>149<br>124<br>92.0<br>49.6 | F1<br>219<br>35.8<br>287<br>83<br>186<br>184<br>176<br>160<br>133<br>91.5<br>42.6 | 0 203 | F0<br>201<br>27.0<br>245<br>49<br>156<br>155<br>145<br>123 | F0<br>241<br>30.6<br>30.6<br>49<br>113<br>112<br>105<br>92.7<br>76.6<br>54.6<br>29.3 | F1<br>208<br>40.9<br>289<br>77<br>142<br>141<br>135<br>125<br>111<br>91.4<br>64.0<br>37.3 | F1<br>209<br>36.6<br>288<br>49<br>94.1<br>92.9<br>88.3<br>80.2<br>69.5<br>55.3 | \$1<br>110<br>38.3<br>250<br>93 | 2<br>110<br>27.6<br>228<br>185<br>326<br>319<br>290<br>244<br>199<br>158<br>125<br>101<br>85.2 | 2<br>108<br>35.3<br>244<br>316<br>491<br>490<br>472<br>436<br>374<br>295<br>232<br>192<br>162<br>131 | 2     | 2                  | 11M<br>Q, K<br>HMIN<br>SCA SHMA<br>SHMA<br>31<br>30<br>29<br>28<br>27<br>26<br>24<br>23<br>22<br>21<br>20<br>19<br>18<br>17<br>16<br>15<br>14<br>13 | A A A A A A A A A A A A A A A A A A A |      |      | Α3   | 3<br>109<br>46.8<br>260<br>371<br>430<br>425<br>411<br>385<br>316<br>278<br>244<br>217<br>193<br>167<br>142<br>128 | 3<br>110<br>41.2 | 1700<br>A2 | 1800<br>A2 | A2<br>200<br>34.9<br>255<br>79<br>195<br>194<br>186<br>171<br>140<br>84.6 | A4<br>200<br>40.2<br>276<br>80<br>148<br>147<br>142<br>132 | 134<br>131<br>123<br>110<br>94.8<br>78.9<br>63.0<br>46.5<br>31.0 | F4<br>237<br>30.7<br>302<br>82<br>193<br>193<br>186<br>168<br>143<br>109<br>64.3 | A6<br>209<br>40.2<br>294<br>95<br>170<br>170<br>165<br>155<br>141 |
| 130<br>120<br>110  |   |   |       |  |  |   |  | 21.9                            | 50.6   | 88.2<br>83.9<br>68.8   | 105   | 131<br>121<br>80.4 | 12  | )                                     |      |      |      |  | 94.0             |            |            |   |  |  |  |   |

|  |  |   |  | 6    | LECT | RON OF  | NSIT   | 4    |             |  |       |      |  |  |        |      | 1    | LECTR | RON O | NS1T | r    |   |                   |   |      |
|--|--|---|--|------|------|---|--|------|-------------|--|-------|------|--|--|--------|------|------|-------|-------|------|------|---|-------------------|---|------|
| RAMEY  | ΔF8,   | PUERTO  | RICO   | )    |      |   |  | 50 W |             | 10   | ) JAN | 1962 | RAMEY  | AF8.   | PUERTO | RIC  | )    |       |       |      | 50 W |   | 10                | JAN   | 1962 |
| TIME   | 0000   | 0100  | 0200   | 0300 | 0400 | 0500  | 0600   | 0700 | 0800        | 0900   | 1000  | 1100 | TIME   | 1200   | 1300   | 1400 | 1500 | 1600  | 1700  | 1800 | 1900 | 2000  | 21.00             | 2200  | 2300 |
| O, KP HAINN SCAT HAMAXE SHMAX SHMAX SHMAX SHMAX 3500 3500 2500 2500 2500 2500 1500 1500 1500 1 | 226<br>222<br>210<br>188<br>159<br>124<br>87.0<br>56.8<br>33.4 | 269<br>36.8<br>351<br>155<br>309<br>302<br>283<br>254<br>210<br>158<br>99.3<br>45.5<br>12.4 | 361<br>125<br>224<br>224<br>219<br>207<br>188<br>167<br>142<br>110<br>61.5 | Δ4   | F4   | 199<br>34.9<br>274<br>93<br>184<br>184<br>187<br>162<br>144 | 217<br>40.6<br>303<br>87<br>156<br>156<br>152<br>144<br>131<br>114<br>91.5<br>65.3<br>38.8 | \$6  | 52.5<br>277 | 734<br>729<br>710<br>675<br>631<br>525<br>4467<br>415<br>328<br>2264<br>239<br>2264<br>239<br>2182<br>219<br>182<br>145<br>125<br>89.4<br>89.4<br>89.4 | Α5    | 45   | Q,KP<br>HMINN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>3100<br>2900<br>270<br>2500<br>270<br>2500<br>270<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130 | A5 13 3 3 5 5 25 6 891 1696 1683 1246 6 1463 1246 154 119 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10 | A5     | A5   | A5   | Δ5    | Α4    | Α4   | Α4   | 39.6<br>303<br>240<br>409<br>408<br>398<br>373<br>339<br>296<br>243<br>182<br>125 | 137<br>296<br>292 | 307<br>159<br>311<br>309<br>293<br>263<br>228<br>185<br>133<br>78.9<br>41.8 | Δ4   |

| FLECTRON DENSITY | FLECTRON DENSITY |
|------------------|------------------|

| RAMEY  | AF8, | PUERTO | R100                           |                                 |  |  | 6                              | 0 W  |   | 1 1  | JAN   | 1962 | RAMEY  | AF8, | PUERT | O RIC   | )    |      |      |      | 50 W              |             | 11                          | JAN                                      | 1962  |
|--|------|--------|--------------------------------|---------------------------------|--|--|--------------------------------|------|---|------|---|------|--|------|-------|---|------|------|------|------|-------------------|-------------|-----------------------------|--|---|
| TIME   | 0000 | 0100   | 0200                           | 0300                            | 0400   | 0500   | 0600                           | 0700 | 0800  | 0900 | 1000  | 1100 | TIME   | 1200 | 1300  | 1400  | 1500 | 1600 | 1700 | 1800 | 1900              | 2000        | 2100                        | 2200                                     | 2300  |
| Q,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>350  | Α4   | Α4     | A3<br>224<br>29.3<br>296<br>94 | A 3<br>208<br>30.6<br>270<br>98 | F3<br>200<br>43.2<br>259<br>48                       | A2<br>268<br>38.0<br>347<br>74                           | A2<br>237<br>43.9<br>321<br>90 | \$2  | 2<br>109<br>39.4<br>249<br>246  | Δ2   | A2<br>106<br>35.6<br>246<br>382   | Δ2   | O,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>330                              | A 2  | Α2    | A2<br>109<br>30.0<br>241<br>408   | A 2  | Α2   | Α2   | A2   |                   | 35.9<br>283 |                             | 38.9                                     | 38.0<br>326                                     |
| 340<br>330<br>320<br>310<br>300<br>290<br>280<br>270   |      |        | 233<br>231<br>217<br>188       | 247                             |  | 144<br>138<br>126<br>112<br>89.3<br>62.4<br>35.8<br>12.4 | 152<br>141<br>126<br>106       |      |   |      |   |      | 320<br>310<br>300<br>290<br>280<br>270<br>260<br>250                             |      |       | 669   |      |      |      |      | 176<br>174<br>166 | 121<br>106  | 113<br>95.5<br>73.5<br>49.9 | 149<br>138<br>123<br>104<br>80.8<br>52.8 | 162<br>156<br>144<br>127<br>102<br>70.0<br>38.9 |
| 260<br>250<br>240<br>230<br>220<br>210<br>200<br>19C<br>180<br>170<br>160<br>150<br>140<br>130 |      |        |                                | 220<br>186<br>125<br>59.4       | 98.5<br>97.5<br>94.0<br>87.5<br>78.9<br>64.0<br>12.4 |  | 76.9<br>43.3<br>16.2           |      | 358<br>353<br>336<br>307<br>269<br>223<br>177<br>142<br>115<br>95.1<br>80.6<br>70.0<br>60.9<br>48.6<br>35.6 |      | 619<br>615<br>589<br>540<br>455<br>334<br>247<br>210<br>179<br>129<br>112<br>99.0<br>96.4<br>93.5 |      | 240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130 |      |       | 669<br>647<br>589<br>484<br>366<br>288<br>249<br>225<br>202<br>178<br>157<br>143<br>136<br>24.5 |      |      |      |      | 122               |             | 27.7                        |  |   |

|  |   |  |                                       | 1   | ELECTR | 10N 08  | ENSIT   | 1    |  |  |   |      |                        |        |        |      | 6    | LECT | RON 01 | ENS1T | Υ   |  |  |   |   |
|--|---|--|---------------------------------------|---|--------|---|---|------|--|--|---|------|------------------------|--------|--------|------|------|------|--------|-------|---|--|--|---|---|
| RAMEY  | AF8,  | PUERTO   | RICO                                  | )   |        |   |   | 0 W  |  | 1.7  | 2 JAN   | 1962 | RAMEY                  | AF8, 1 | PUERTO | RICO |      |      |        |       | 60 W  |  | 1.2  | MAL   | 1962  |
| TIME   | 0000  | 0100   | 0200                                  | 0300  | 0400   | 0500  | 0600  | 0700 | 0800   | 0900   | 1000  | 1100 | TIME                   | 1200   | 1300   | 1400 | 1500 | 1600 | 1700   | 1800  | 1900  | 2000   | 2100   | 2200  | 2300  |
| O, KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAXF<br>SHMAXF<br>3200<br>2500<br>2700<br>2500<br>2400<br>2200<br>1900<br>1800<br>1700<br>1500<br>1500<br>1500<br>1500<br>1500<br>1500<br>15 | 315<br>97<br>168<br>168<br>163<br>154<br>140<br>119<br>92.9<br>66.3<br>42.7<br>24.9 | 238<br>31.5<br>304<br>87<br>206<br>205<br>195<br>175 | 247<br>73<br>278<br>270<br>234<br>139 | 249<br>79<br>226<br>221<br>206<br>174<br>87.5 | 305    | 283<br>59<br>102<br>102<br>99.9<br>94.7<br>86.5<br>75.8<br>62.8<br>48.3<br>33.3 | 103<br>103<br>97.6<br>86.7<br>756.0<br>39.0<br>24.9 | \$1  | 320<br>320<br>318<br>308<br>287<br>258<br>223<br>186<br>153<br>318<br>82.9<br>957.3<br>482.9 | 28.8<br>244<br>301<br>482<br>479<br>396<br>323<br>259<br>1188<br>164<br>119<br>96.5<br>886.4 | 761<br>749<br>680<br>517<br>326<br>242<br>214<br>193<br>143<br>119<br>108 | AO   | 0 + K P HMIN SCAT HMAX | ΔΟ     | AO     | Al   | Al   | ΑΙ   | Α2     | A2    | 200<br>36.8<br>265<br>101<br>225<br>223<br>215<br>199<br>167<br>115<br>65.5 | 199<br>32.2<br>245<br>31<br>85.4<br>84.9<br>80.8 | 45.6<br>303<br>62<br>92.3<br>92.2<br>90.4<br>86.4<br>86.6<br>51.1<br>40.6<br>521.3 | 313<br>70<br>122<br>122<br>118<br>111<br>99.9<br>84.4<br>67.1<br>50.9<br>36.7<br>25.0 | 224<br>48.9<br>335<br>110<br>155<br>154<br>151<br>145<br>124<br>110<br>95.6<br>77.6<br>54.6<br>36.4 |

| FLECTRON DENSITY | ELECTRON DENSITY |
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|   |   |   |  | 6   | LECTR  | ON 06   | NS1T  | ,  |  |  |  |  |   |        |       |       | 6  | LECT | RON O   | ENS1T | Y                                     |  |  |  |   |
|---|---|---|--|---|--|---|---|--|--|--|--|--|---|--------|-------|-------|--|------|---|-------|---------------------------------------|--|--|--|---|
| RAMEY   | AF8, F  | UERTO R   | 100  |   |  |   |   | 50 W   |  | 14   | JAN  | 1962   | RAMEY   | AF8, 1 | PUERT | O RIC | 0  |      |   |       | 50 W                                  |  | Į4   | JAN  | 1962  |
| TIME  | 0000  | 0100 02   | 00 0   | 0300  | 0400   | 0500  | 0600  | 0700   | 0800   | 0900   | 1000   | 1100   | TIME  | 1200   | 1300  | 1400  | 1500   | 1600 | 1700  | 1800  | 1900                                  | 2000   | 2100   | 2200   | 2300  |
| Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAXF<br>SHMAX<br>3100<br>2900<br>2200<br>2200<br>2200<br>2100<br>200<br>1900<br>1800<br>1700<br>1600<br>1500<br>1400<br>1100 | 304<br>84<br>188<br>187<br>177<br>156<br>130<br>101<br>66.5<br>37.3 | 2<br>35<br>3<br>1<br>2<br>2<br>2<br>2<br>2<br>2<br>1<br>1<br>89<br>42 | .5<br>06<br>18<br>43<br>41<br>30<br>10<br>82<br>46<br>.5 | 288<br>114<br>281<br>277<br>258<br>226<br>172<br>91.0<br>32.2 | A1<br>211<br>19.9<br>252<br>75<br>303<br>302<br>273<br>306<br>60.1 | 222<br>216<br>200<br>170<br>116<br>49.6<br>12.4 | 156<br>155<br>147<br>132<br>107<br>68.6<br>12.4 | \$1<br>100<br>227<br>79<br>227<br>79<br>149<br>147<br>136<br>89.8<br>864.9<br>333.5<br>27.8<br>227.8<br>223.6<br>22.9<br>920.8<br>13.0 | 271<br>265<br>238<br>196<br>113<br>95.3<br>88.3<br>650.5 | 326<br>326<br>326<br>317<br>256<br>204<br>159<br>108<br>99.3<br>94.0<br>91.2 | 33.2<br>220<br>251<br>368<br>368<br>359<br>2294<br>256<br>227<br>183<br>154<br>127 | 373<br>370<br>352<br>3294<br>262<br>231<br>200<br>164<br>133 | Q.KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>330<br>320<br>310<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>220<br>210<br>200<br>180<br>170<br>160<br>150 | Δ4     | Δ4    | АЗ    | 43<br>109<br>35.7<br>258<br>476<br>672<br>664<br>629<br>569<br>476<br>374<br>299<br>212<br>2195<br>182<br>1123<br>182<br>1123<br>183<br>184<br>1123<br>184 | АЗ   | 4 110<br>47.8 285<br>581<br>768<br>750<br>716<br>666<br>598<br>511<br>128<br>108<br>89.2<br>77.2<br>169.8<br>54.5 | Δ4    | 255<br>97<br>259<br>258<br>243<br>214 | 113<br>112<br>109<br>103<br>95.0<br>84.0<br>71.6<br>58.3<br>43.3<br>28.2 | 3 241 36.8 314 78 163 314 78 165 167 146 66.9 35.5 | 33.6<br>321<br>93<br>193<br>188<br>174<br>152<br>122<br>85.8<br>55.3<br>29.9 | 199<br>46.3<br>303<br>105<br>163<br>163<br>160<br>153<br>142<br>127 |

| FLECTRON OFNSITY | FLECTRON DENSITY |
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| RAMEY | AFB, F | VERTO | RICE |      |      |      | 6    | 0 W  |              | 15         | JAN        | 1962       | RAMEY | AFB, | PUERTO | RICO | )    |      |      |      | 50 W |      | 15   | JAN  | 1962 |
|-------|--------|-------|------|------|------|------|------|------|--------------|------------|------------|------------|-------|------|--------|------|------|------|------|------|------|------|------|------|------|
| TIME  | 0000   | 0100  | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800         | 0900       | 1000       | 1100       | TIME  | 1200 | 1300   |      | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
| 0.KP  | 2      | 2     | F 3  | 3    | 3    | 2    | 2    | 5.2  | 2            | 2          | 2          | 2          | Q,KP  | A 2  | A 2    | 2    | 2    | 2    | 3    | S 3  | 3    | 2    | Α2   | 2    | 2    |
| HM1N  | 253    |       | 211  | 220  | 240  | 246  | 208  |      | 113          | 109        | 109        | 106        | HMIN  |      | 109    | 109  | 108  | 106  | 109  |      | 181  | 206  | 199  | 199  | 198  |
| SCAT  | 30 - 2 | 29.9  | 31.9 | 26.5 | 29.6 | 32.5 | 27.0 |      | 32.0         | 28.3       | 31.3       | 29.0       | SCAT  |      | 35.0   | 39.8 | 38.4 | 42.8 | 33.3 |      | 27.9 | 44.1 | 39.4 | 29.0 | 41.1 |
| HMAXE | 3.31   | 314   | 287  | 274  | 305  | 317  | 266  |      | 229          | 237        | 234        |            | HMAXE |      | 256    | 256  | 262  | 250  | 259  |      | 229  | 285  | 273  | 250  | 260  |
| SHMAX | 7.3    | 108   | 159  | 94   | 103  | 108  | 86   |      | 195          | 321        | 362        | 326        | SHMAX |      | 455    | 484  | 493  | 482  | 375  |      | 81   | 103  | 75   | 40   | 3.6  |
| K.M.  |        |       |      |      |      |      |      |      |              |            |            |            | KM    |      |        |      |      |      |      |      |      |      |      |      |      |
| 340   | 163    |       |      |      |      |      |      |      |              |            |            |            | 290   |      |        |      |      |      |      |      |      | 187  |      |      |      |
| 330   | 163    |       |      |      |      |      |      |      |              |            |            |            | 280   |      |        |      |      |      |      |      |      | 186  | 148  |      |      |
| 320   | 157    | 236   |      |      |      | 243  |      |      |              |            |            |            | 270   |      |        |      | 678  |      |      |      |      | 181  | 148  |      | 76.1 |
| 310   | 143    | 235   |      |      | 247  |      |      |      |              |            |            |            | 260   |      |        | 619  | 678  |      | 564  |      |      | 172  | 145  |      | 76.1 |
| 300   | 119    | 224   |      |      | 245  | 227  |      |      |              |            |            |            | 250   |      | 659    |      | 661  | 707  | 553  |      |      | 158  | 136  |      | 75.0 |
| 290   | 89.4   | 198   | 358  |      | 231  | 202  |      |      |              |            |            |            | 240   |      | 630    | 594  | 622  | 698  | 517  |      |      | 136  | 123  |      | 71.5 |
| 280   | 61.2   | 167   | 353  | 271  | 202  | 166  |      |      |              |            |            |            | 230   |      | 574    |      | 559  | 670  | 457  |      |      | 107  |      |      | 65.9 |
| 270   | 38.8   | 131   | 332  | 270  |      | 116  |      |      |              |            |            |            | 220   |      | 489    |      | 468  | 622  | 385  |      |      | 65.9 |      |      |      |
| 260   | 22.2   | 89.6  | 294  | 252  |      | 66.0 |      |      |              |            |            |            | 210   |      | 383    | 423  | 366  | 553  | 317  |      |      | 26.3 |      |      |      |
| 250   |        | 50.1  |      |      | 55.4 | 23.6 |      |      |              |            |            |            | 200   |      | 298    | 354  | 292  | 449  | 255  |      | 168  |      | 12.4 | 12-4 | 12.4 |
| 240   |        | 16.8  | 171  | 155  |      |      | 181  |      |              | 531        | 580        |            | 190   |      | 252    | 301  | 250  | 325  | 206  |      | 80.7 |      |      |      |      |
| 230   |        |       | 81.2 | 66.9 |      |      | 128  |      | 354          |            | 578        |            | 180   |      | 224    | 265  | 225  | 239  | 170  |      |      |      |      |      |      |
| 220   |        |       | 38.3 |      |      |      | 62.7 |      | 347          | 485        | 552        |            | 170   |      | 196    | 242  | 205  | 201  | 145  |      |      |      |      |      |      |
| 210   |        |       |      |      |      |      | 18.4 |      | 321          | 414        | 497        |            | 160   |      | 174    | 222  | 188  | 175  | 125  |      |      |      |      |      |      |
| 200   |        |       |      |      |      |      |      |      | 279          | 338        | 412        |            | 150   |      | 160    | 204  | 172  | 152  |      |      |      |      |      |      |      |
| 190   |        |       |      |      |      |      |      |      | 219          | 273        | 321<br>261 | 390        | 140   |      | 152    | 186  | 147  |      | 91.1 |      |      |      |      |      |      |
| 180   |        |       |      |      |      |      |      |      | 158          | 225<br>192 | 229        | 304<br>253 | 130   |      | 146    | 165  | 130  |      | 78.0 |      |      |      |      |      |      |
| 170   |        |       |      |      |      |      |      |      |              |            | 207        | 227        | 120   |      | 140    |      |      | 106  |      |      |      |      |      |      |      |
| 160   |        |       |      |      |      |      |      |      | 93.6         | 164        | 183        |            | 110   |      | 30 a 3 | 27.3 | 30.5 | 68.2 | 39.4 |      |      |      |      |      |      |
| 150   |        |       |      |      |      |      |      |      | 83.5         |            | 158        |            |       |      |        |      |      |      |      |      |      |      |      |      |      |
| 140   |        |       |      |      |      |      |      |      | 70.2<br>58.0 |            | 137        |            |       |      |        |      |      |      |      |      |      |      |      |      |      |
| 130   |        |       |      |      |      |      |      |      |              | 92.4       |            |            |       |      |        |      |      |      |      |      |      |      |      |      |      |
| 120   |        |       |      |      |      |      |      |      | 20.8         |            | 41.8       |            |       |      |        |      |      |      |      |      |      |      |      |      |      |
| 110   |        |       |      |      |      |      |      |      |              | 6103       | 7100       | 103        |       |      |        |      |      |      |      |      |      |      |      |      |      |
|       |        |       |      |      |      |      |      |      |              |            |            |            |       |      |        |      |      |      |      |      |      |      |      |      |      |

|  | ELECTRON DENSITY   |   |  |   |   |  |   |      |  |  |   |  |  |   |   |   | 6  | LECT  | O NOS   | ENSIT | 1                                     |  |   |   |   |
|--|--------------------|---|--|---|---|--|---|------|--|--|---|--|--|---|---|---|--|---|---|-------|---------------------------------------|--|---|---|---|
| RAMEY  | AF8,               | PUERTO  | RIC  |   |   |  |   | 60 W |  | 16   | 5 JAN   | 1962   | RAMEY  | AF8, i  | PUERTI  | R1C   | )  |   |   |       | 0 W                                   |  | 16  | JAN   | 1962  |
| TIME   | 0000               | 0100  | 0200   | 0300  | 0400  | 0500   | 0600  | 0700 | 0800   | 0900   | 1000  | 1100   | TIME   | 1200  | 1300  | 1400  | 1500   | 1600  | 1700  | 1800  | 1900                                  | 2000   | 2100  | 2200  | 2300  |
| 0,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>XM<br>3400<br>3200<br>3200<br>2900<br>2700<br>2500<br>2500<br>2400<br>2500<br>2000<br>1900<br>1800<br>1700<br>1600<br>1500<br>1400<br>1500<br>1400<br>1400<br>1400<br>1400<br>14 | 275<br>33.4<br>339 | 166<br>159<br>149<br>133<br>109<br>80.8<br>53.6<br>33.5<br>15.6 | 38.2<br>291<br>100<br>200<br>200<br>196<br>184<br>166<br>136<br>97.2 | 231<br>26.2<br>294<br>87<br>228<br>226<br>209<br>181<br>137<br>83.9<br>38.5 | 259<br>33.3<br>332<br>92<br>205<br>205<br>198<br>182<br>156<br>117<br>70.4<br>36.3<br>4.7 | 289<br>86<br>202<br>198<br>183<br>187<br>117<br>76-2<br>37-5 | 203<br>43.3<br>291<br>83<br>147<br>147<br>145<br>139<br>129 |      | 26.2<br>222<br>175<br>349<br>349<br>349<br>288<br>226<br>125<br>99.3<br>86.1<br>73.1<br>56.7<br>47.9 | 390<br>385<br>368<br>337<br>290<br>241<br>201<br>169<br>142<br>121<br>98.1 | 32.2<br>226<br>302<br>469<br>466<br>462<br>333<br>324<br>207<br>181<br>156<br>126 | 42.5<br>223<br>290<br>392<br>392<br>383<br>363<br>363<br>294<br>259<br>215<br>182<br>137 | Q.KP<br>HMINN<br>SCAT<br>HHAAKF<br>SHMAX<br>3000<br>2900<br>2500<br>2500<br>2400<br>2000<br>1900<br>1800<br>1700<br>1500<br>1500<br>1400<br>1300<br>1200<br>1100 | 456<br>451<br>428<br>400<br>367<br>333<br>300<br>274<br>253<br>220<br>202<br>131<br>122 | 30.8<br>255<br>482<br>707<br>702<br>664<br>589<br>486<br>381<br>3251<br>233<br>251<br>233<br>251<br>233<br>251<br>200<br>188<br>131 | 710<br>708<br>671<br>587<br>455<br>347<br>281<br>252<br>234<br>214<br>188<br>157<br>142 | 231<br>286<br>494<br>494<br>474<br>225<br>254<br>229<br>164<br>137<br>124<br>117 | 48.7<br>267<br>417<br>467<br>464<br>452<br>429<br>397<br>360<br>322<br>255<br>227<br>201<br>143<br>115<br>143<br>115<br>195.3 | 815<br>809<br>773<br>707<br>603<br>469<br>340<br>253<br>201<br>168<br>145<br>126<br>110<br>97.6<br>70.9<br>66.1 | \$3   | 255<br>76<br>187<br>186<br>178<br>163 | 299<br>114<br>214<br>211<br>202<br>186<br>163<br>130<br>94.1<br>52.0 | 32.3<br>273<br>95<br>225<br>224<br>215<br>196 | 280<br>103<br>243<br>238<br>224<br>194<br>148<br>87.9<br>25.5 | 292<br>96<br>163<br>163<br>160<br>153<br>141<br>123<br>98.6<br>73.6 |

| RAMEY AF8, PUERTO RICO 60 W 17 JAN 1962 RAMEY AF8, PUERTO RICO  | 60 W 17 JAN 1962  |  |
|---|---|--|
|   |   |  |
| TIME 0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 TIME 1200 1300 1400 1500 1600  | 0 1700 1800 1900 2000 2100 2200 2300  |  |
| HAMAR   331   313   282   274   294   290   289   233   237   226   213   HAMAR   201   293   245   234   259   259   349   373   267   SHMAX   232   575   356   309   400 | 3 32.5 35.6 29.8 39.4 53.6 39.2 51.1   9 258 270 256 270 291 285 335   0 359 340 169 78 79 04 87   123 129 126   163 122 129 88.8   163 122 129 88.8   163 122 129 88.8   17 567 638 448 161 113 117 60.2   2 558 600 444 153 105 103 44.8   164 124 365 115 78.1 55.3 7.7   2 382 287 273 80.3 55.0 30.8   18 303 173 139 40.4 30.0   4 194 70.2   1 19 18 18 18 18 18 18 18 18 18 18 18 18 18 |  |

|  | ELECTRON DENSITY  |   | ELECTR   | ON DENSITY   |
|--|---|---|--|--|
| RAMEY AF8, PUERTO RICO   | 60 W  | 18 JAN 1962 RAM   | Y AF8, PUERTO RICO   | 60 W 18 JAN 1962   |
| TIME 0000 0100 0200  | 0300 0400 0500 0600 0700  | 0800 0900 1000 1100 TI  | 1E 1200 1300 1400 1500 1600  | 1700 1800 1900 2000 2100 2200 2300   |
| Q,KP F0 F0 F0<br>HMIN 251 247 240<br>SCAT 32.6 31.6 31.0<br>HMAXF 322 309 303<br>SHMAX 60 72 83  | 0 f0 1 1 S1<br>227 248<br>27,2 29,7 41.5 38.0<br>282 263 317 308<br>94 91 82 61 |   | N 109 108 108 107 109<br>N 36-9 38-7 69-3 38-5 27-2<br>F 227 236 284 248 236<br>XX 339 369 589 414 296 | A0 A0 0 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3  |
| 330 131<br>320 131<br>310 127 165 204<br>300 116 161 203<br>290 100 148 195<br>280 79.8 133 176<br>270 54.3 111 145<br>260 29.3 74.7 100<br>250 25.5 49.0<br>240 3.1 | 20.5 174 16.0<br>73.9<br>.4   | 387 438 226 228 337 480 424 22 298 333 443 403 21 221 225 372 363 11 30 185 21 10 130 188 191 215 11 78.9 118 162 183 178.2 | 100  | 127 170 127 170 101 125 169 101 116 162 98.6 101 151 151 92.6 81.6 132 149 86.7 57.4 107 142 62.5 32.5 76.9 130 342 30.1 5.4 43.3 112 334 16.2 88.2 31 37.3 135 12.4 |

|  |   |                          |  |   | ELECTA                          | ON 06  | NSLTY             | ,    |  |  |   |  |  |  |        |      |      | ELECT   | RON O  | ENSIT | Y  |  |                    |   |  |
|--|---|--------------------------|--|---|---------------------------------|--|-------------------|------|--|--|---|--|--|--|--------|------|------|---|--|-------|--|--|--------------------|---|--|
| RAMEY  | AFB. I  | PUERTO                   | RICO   | )   |                                 |  | 6                 | 0 W  |  | 1  | 9 JAN   | 1962   | RAMEY  | AF8,   | PUERTO | RICO | )    |   |  |       | 50 W   |  | 19                 | JAN   | 1962   |
| TIME   | 0000  | 0100                     | 0200   | 0300  | 0400                            | 0500   | 0600              | 0700 | 0800   | 0900   | 1000  | 1100   | TIME   | 1200   | 1300   | 1400 | 1500 | 1600  | 1700   | 1800  | 1900   | 2000   | 2100               | 2200  | 2300   |
| 0, KP<br>HM1NN<br>SCAT<br>HMAX<br>S600<br>3500<br>3100<br>3200<br>2700<br>2800<br>2700<br>2500<br>2400<br>2200<br>1900<br>1800<br>1701<br>1600<br>1500<br>1400<br>1200<br>1200<br>1200<br>1200<br>1200<br>1200<br>12 | 312<br>88<br>179<br>179<br>174<br>163<br>145<br>120<br>85.4<br>45.9<br>16-5 | 200<br>16.1<br>231<br>60 | 124<br>121<br>113<br>100<br>83.6<br>63.6<br>40.8 | 142<br>142<br>139<br>131<br>117<br>97.5<br>68.2<br>40.7 | 33.5<br>359<br>66<br>154<br>151 | 158<br>158<br>154<br>143<br>127<br>108<br>86.3<br>61.3<br>38.5<br>20.1 | 187<br>184<br>174 | 52   | 409<br>397<br>358<br>409<br>397<br>358<br>328<br>183<br>141<br>113<br>94-0<br>81-9<br>76-0<br>81-9 | 740<br>728<br>673<br>561<br>400<br>277<br>722<br>188<br>156<br>113<br>106<br>113<br>106<br>198-6 | 107<br>24.1<br>235<br>461<br>941<br>932<br>855<br>655<br>625<br>227<br>211<br>188<br>154<br>132 | 67.7<br>271<br>556<br>536<br>536<br>5334<br>509<br>480<br>427<br>8344<br>2294<br>243<br>243<br>2153<br>134 | O,KP HMINN SCAT HMAXF SHMAX  810 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 | 4 108<br>65.5 280<br>630<br>591<br>591<br>597<br>505<br>464<br>417<br>370<br>311<br>300<br>274<br>252<br>234<br>215<br>252<br>234<br>252<br>252<br>252<br>255<br>255<br>255<br>255<br>255<br>255<br>25 | A4     | A4   | A4   | 580<br>580<br>572<br>551<br>514<br>412<br>352<br>301<br>257<br>221<br>189<br>159<br>131 | 40-1<br>260<br>352<br>491<br>484<br>461<br>423<br>375<br>319<br>262<br>171<br>137<br>111<br>92-4<br>79-9<br>73-9<br>66-9 | Al    | 286<br>182<br>358<br>355<br>340<br>312<br>270<br>215 | 35.2<br>300<br>143<br>304<br>298<br>279<br>247<br>194<br>137<br>79.1 | 26.0<br>285<br>123 | 304<br>154<br>342<br>341<br>328<br>299<br>258<br>196<br>112<br>43.2 | 299<br>130<br>281<br>276<br>256<br>224<br>183<br>134<br>79.6 |

|   | ELECTRON DENSITY           |                   |                                 |                                 |                          |   |                           |      |  |  |   |      |   |  |        |   |                                 | ELECT  | RON O                                     | ENS1T  | ,                 |   |                            |  |   |
|---|----------------------------|-------------------|---------------------------------|---------------------------------|--------------------------|---|---------------------------|------|--|--|---|------|---|--|--------|---|---------------------------------|--|---|--|-------------------|---|----------------------------|--|---|
| RAMEY   | AFB.                       | PUERTI            | RIC                             | )                               |                          |   |                           | 0 W  |  | 21   | ) JAN   | 1962 | RAMEY   | AF8, 1   | PUERTI | 810   | 0                               |  |   |  | 50 W              |   | 2                          | NAL O                                    | 1962  |
| TIME  | 0000                       | 0100              | 0200                            | 0300                            | 0400                     | 0500                                    | 0600                      | 0700 | 0800   | 0900   | 1000  | 1100 | TIME  | 1200   | 1300   | 1400  | 1500                            | 1600   | 1700                                      | 1800   | 1900              | 2000                                    | 2100                       | 2200                                     | 2300  |
| Q.KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM  | 200<br>32.8<br>282<br>108  | 43.2<br>271       | 43.3                            |                                 | 213<br>32.0<br>279<br>81 |   | 239<br>36.0<br>317<br>112 | 51   | 242  | 29.5<br>253  | 40<br>109<br>27-1<br>244<br>453               |      | O,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM  | A1<br>110<br>25.2<br>209<br>269                | Δ1     | 108<br>31.5<br>238<br>436                     | 43.0<br>248                     | 35.9   | 238                                       | 34.5<br>247                                  |                   | 2<br>235<br>32.8<br>309<br>86           |                            | 200<br>25.6<br>246                       | F1<br>252<br>28.2<br>319<br>76                  |
| 320<br>310<br>300<br>290<br>280<br>270<br>260 | 225<br>224<br>217<br>199   | 187<br>187<br>184 | 188<br>188<br>185<br>176<br>164 | 215<br>215<br>207<br>190<br>166 | 188                      | 188<br>185<br>174<br>155<br>128<br>93.6 | 213<br>194<br>166<br>132  |      |  | 923  |   |      | 320<br>310<br>300<br>290<br>280<br>270<br>260 |  |        |   |                                 |  |   |  | 179<br>178<br>173 | 191<br>188<br>175<br>154<br>121<br>83.2 | 297<br>296<br>282<br>250   |  | 181<br>177<br>160<br>138<br>109<br>74.8<br>37.0 |
| 250<br>240<br>230<br>220<br>210<br>200<br>190 | 174<br>142<br>98.5<br>60.1 | 175<br>164        | 120<br>91.1<br>61.4<br>37.7     | 136<br>95.3<br>44.1             | 149<br>119<br>75.0       | 55.7                                    | 49.6                      |      | 529<br>528<br>505<br>451<br>351<br>251<br>178<br>138 | 921<br>880<br>785<br>600<br>414<br>294<br>235<br>202 | 819<br>814<br>761<br>651<br>489<br>346<br>274 |      | 250<br>240<br>230<br>220<br>210<br>200<br>190 | 491<br>474<br>418<br>333                       |        | 707<br>696<br>651<br>559<br>429<br>330<br>277 |                                 | 505<br>505<br>490<br>455<br>400<br>337<br>279<br>236 | 368<br>364<br>348<br>319<br>283<br>239    | 326<br>260                                   | 146               | 47.0<br>20.2                            | 193<br>118<br>55.8<br>12.4 | 156<br>154<br>140<br>115<br>71.2<br>12.4 | 37.0  |
| 170<br>160<br>150<br>140<br>130<br>120        |                            |                   |                                 |                                 |                          |   |                           |      | 113<br>93.8<br>79.8<br>70.7<br>66.6<br>56.0<br>12.4  | 176<br>151<br>129<br>113<br>102<br>96.8              | 217<br>193<br>166<br>143<br>128<br>120        |      | 170<br>160<br>150<br>140<br>130<br>120<br>110 | 272<br>243<br>221<br>193<br>157<br>143<br>12.4 |        | 248<br>227<br>205<br>184<br>161<br>140        | 244<br>216<br>190<br>159<br>137 | 204<br>179<br>156<br>135<br>116<br>105               | 158<br>130<br>107<br>89.5<br>76.9<br>70.2 | 58.1<br>45.9<br>40.1<br>37.4<br>36.1<br>31.9 |                   |   |                            |  |   |

| ELECTRON DENSITY | FLECTRON DENSITY |
|------------------|------------------|

| RAMEY   | AF8,                            | PUERTO                           | R100                                     | )    |                   |                   |                                    | 50 W |  | 2  | L JAN   | 1962   | RAMEY  | AF8.  | PUERT                                  | D RICO   | )  |   |      | 6    | 0 W  |   | 21   | JAN                              | 1962                          |
|---|---------------------------------|----------------------------------|--|------|-------------------|-------------------|------------------------------------|------|--|--|---|--|--|---|--|--|--|---|------|------|------|---|------|----------------------------------|-------------------------------|
| TIME  | 0000                            | 0100                             | 0200                                     | 0300 | 0400              | 0500              | 0600                               | 0700 | 0800   | 0900   | 1000  | 1100   | TIME   | 1200  | 1300                                   | 1400   | 1500   | 1600  | 1700 | 1800 | 1900 | 2000  | 2100 | 2200                             | 2300                          |
| Q, KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>340<br>330               | F1<br>227<br>35.3<br>307<br>100 | 230<br>21.5<br>279               | 25.9                                     |      | 24.0              | 38.7<br>317<br>59 | 233<br>50.1<br>332<br>97<br>149    | \$2  | 28.1   | 237  |   | 109<br>31.8<br>208                                   | O, KP<br>HM1N<br>SCAT<br>HMAXE<br>SHMAX<br>KM<br>310<br>300        | 43.4<br>253   | 108<br>53.1<br>274                     | 27.4   | 242  | 260   | A2   | Α2   | A 2  | 210<br>43.7<br>300<br>140<br>240<br>240                       | AO   | 23.7<br>258                      | 0<br>192<br>27.3<br>227<br>35 |
| 320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>220 | 150<br>116<br>74.9              | 232<br>222<br>188<br>133<br>59.5 | 194<br>187<br>165<br>132<br>83.4<br>20.5 | 42.9 | 142<br>140<br>126 |                   | 123<br>107<br>86.2<br>65.0<br>43.7 |      | 494<br>491<br>464<br>405   | 669<br>657<br>596<br>466                                       | 651<br>614  | 434  | 290<br>280<br>270<br>260<br>250<br>240<br>230<br>210<br>200<br>190 | 517<br>516<br>506<br>481<br>442<br>398<br>355<br>319<br>291 | 561<br>532<br>490<br>444<br>397<br>354 | 654<br>605<br>514<br>410                       | 539<br>538<br>528<br>504<br>467<br>406<br>336<br>276 | 426<br>426<br>421<br>408<br>382<br>354<br>323<br>294<br>266 |      |      |      | 236<br>227<br>211<br>190<br>161<br>123<br>82.0<br>44.5<br>1.7 |      | 319<br>309<br>272<br>190<br>46.7 | 123<br>121<br>112<br>84-1     |
| 200<br>190<br>180<br>170<br>160<br>150<br>140<br>130<br>120               |                                 |                                  |  |      | 12.4              |                   |                                    |      | 316<br>224<br>156<br>117<br>94.9<br>81.6<br>73.7<br>59.8<br>53.8<br>12.4 | 331<br>244<br>199<br>167<br>139<br>119<br>99.6<br>90.6<br>86.5 | 483<br>313<br>240<br>207<br>173<br>142<br>128<br>122<br>115 | 427<br>400<br>346<br>276<br>239<br>213<br>176<br>151 | 170<br>160<br>150<br>140<br>130<br>120                             | 271<br>251<br>232<br>194<br>158<br>146<br>59.8              | 271<br>251<br>230<br>207<br>176<br>149 | 240<br>217<br>195<br>178<br>145<br>133<br>73.8 | 237<br>212<br>187<br>161<br>140<br>128               | 207<br>179<br>152<br>125<br>110<br>104                      |      |      |      |   |      |                                  |                               |

|  |   |  |                                 | -  | LECTE   | RON OF                                 | NSIT  | Υ    |  |   |                    |   |   |      |  |   |  | ELECT  | RON 0   | ENS1T   | 1   |   |  |   |  |
|--|---|--|---------------------------------|--|---|--|---|------|--|---|--------------------|---|---|------|--|---|--|--|---|---|---|---|--|---|--|
| RAMEY A  | 18. I   | PUERTO   | R1C                             |  |   |  |   | 60 W |  | 2   | 2 JAN              | 1962  | RAMEY   | AF8, | PUERTI   | D RIC   | 0  |  |   |   | 00 W  |   | 22                                     | . JAN   | 1962   |
| TIME   | 0000  | 0100   | 0200                            | 0300   | 0400  | 0500                                   | 0600  | 0700 | 0800   | 0900  | 1000               | 1100  | TIME  | 1200 | 1300   | 1400  | 1500   | 1600   | 1700  | 1800  | 1900  | 2000  | 2100                                   | 2200  | 2300   |
| HMAXF<br>SHMAX<br>KM<br>320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>240<br>230 | 302<br>64<br>123<br>123<br>120<br>111<br>98.5<br>81.6<br>63.7 | 238<br>35.0<br>313<br>90<br>197<br>196<br>190<br>175<br>151<br>112<br>67.9<br>38.5<br>12.4 | 236<br>231<br>211<br>177<br>131 | 256<br>256<br>249<br>228<br>189<br>138<br>72.5 | 269<br>101<br>253<br>247<br>224<br>190<br>140<br>75.9<br>30.1 | 258<br>258<br>255<br>237<br>202<br>147 | 311<br>139<br>222<br>218<br>210<br>196<br>177<br>152<br>123<br>87.3<br>56.5<br>33.1 | 50   | 261<br>359<br>541<br>531<br>503<br>457<br>390<br>313<br>240<br>1147<br>119<br>97.5<br>82.6<br>74.1<br>67.7 | 26.5<br>238<br>362<br>660<br>647<br>585<br>490<br>373<br>279<br>230<br>196<br>168<br>143<br>123<br>110<br>102 | 24.4<br>252<br>600 | 109<br>39.64<br>264<br>715<br>1013<br>1009<br>979<br>914<br>820<br>694<br>8406<br>322<br>234<br>250<br>234<br>215<br>184<br>154 | Q.KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>330<br>320<br>310<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140 | ΑΟ   | 288<br>917<br>1161<br>1111<br>1021<br>907<br>770<br>628<br>497<br>336<br>336<br>276<br>261<br>248<br>233<br>217<br>189 | 35.7 267<br>840<br>1341<br>1328<br>1264<br>1147<br>2521<br>3301<br>267<br>245<br>220<br>2186<br>169 | 747<br>737<br>695<br>380<br>226<br>226<br>204<br>182 | 242<br>348<br>448<br>440<br>420<br>386<br>349<br>308<br>266<br>226<br>141<br>124 | 234<br>266<br>517<br>514<br>480<br>407<br>310<br>225<br>170<br>135<br>112<br>95.2<br>83.4<br>76.2<br>72.5 | 233<br>190<br>463<br>461<br>427<br>356<br>240<br>83.3<br>60.1<br>50.2<br>45.0<br>42.5<br>40.9<br>35.0 | 307<br>118<br>144<br>144<br>142<br>137<br>132<br>123<br>111<br>98.1 | 303<br>90<br>169<br>169<br>165<br>158<br>147<br>127<br>98.2<br>58.0<br>12.4 | 28.0<br>267<br>58<br>170<br>167<br>154 | 29.6<br>279<br>66<br>171<br>167<br>153<br>129<br>87.4<br>43.6 | 217<br>43.8<br>321<br>105<br>163<br>161<br>154<br>130<br>113<br>94.3<br>70.7<br>49.1<br>32.9 |

| ELECTRON DENSITY | ELECTRON DENSITY |
|------------------|------------------|

| RAMEY AF8, PUERTO RICO 60 W 23 JAN 1962 RAMEY   | r AF8, PUERTO RICO 60 W 23 JAN 1962   |
|---|---|
| TIME 0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 TIME   | 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300   |
| O, KP FO O O O FO O AO SO O O O O O O O, KF HMIN 200 232 239 239 200 188 199 110 109 109 107 107 108 SCAT 27.4 29.0 28.8 31.2 25.9 34.5 45.5 35.0 28.6 34.5 32.2 23.8 SCAT 37.4 29.0 28.8 31.2 25.9 34.5 45.5 35.0 28.6 34.5 32.2 23.5 SCAT 37.4 29.0 28.8 31.2 25.9 34.5 45.5 32.2 23.5 SCAT 37.5 SCAT | 108 108 103 108 108 108 202 191 241 201 224 3 38 38.7 39.7 25.6 94.3 44.3 36.9 47.1 25.6 94.3 44.3 36.9 47.1 25.6 94.3 44.3 36.9 47.1 26.90 99 93 34 38.2 35.6 35.6 323 237 97 126 90 99 93 34 38.2 35.6 35.6 323 237 97 126 90 99 93 34 38.2 35.6 35.6 323 237 97 126 90 99 93 34 36.2 35.6 35.6 323 237 97 126 90 99 93 34 35.6 35.6 323 237 97 126 90 99 93 34 35.6 35.6 35.6 35.6 35.6 35.6 35.6 35.6 |

|   | ELECTRON DENSITY  |  |  |                                |  |  |  |   |   |   |  |   |  |  |   |  | LECT   | RON OF   | ENS1T | 1                 |  |   |   |   |
|---|---|--|--|--------------------------------|--|--|--|---|---|---|--|---|--|--|---|--|--|--|-------|-------------------|--|---|---|---|
| RAMEY AF8.  | PUERTO  | RICO   |  |                                |  |  | 50 W   |   | 24  | JAN   | 1962   | RAMEY   | AFB.   | PUER <b>T</b> (  | RICE  | )  |  |  |       | 0 W               |  | 2   | 4 JAN   | 1962  |
| T1ME 0000   | 0100  | 0200   | 0300   | 0400                           | 0500   | 0600   | 0700   | 0800  | 0900  | 1000  | 1100   | TIME  | 1200   | 1300   | 1400  | 1500   | 1600   | 1700   | 1800  | 1900              | 2000   | 2100  | 2200  | 2300  |
| HMAXF 316<br>SHMAX 95<br>KM 340<br>330 320 193<br>310 191<br>300 181<br>290 161<br>280 136<br>270 108<br>200 78-2 | 248<br>36.5<br>337<br>129<br>242<br>240<br>229<br>209<br>184<br>153<br>111<br>740.2<br>12.4 | 302<br>106<br>243<br>243<br>236<br>218<br>188<br>144 | 292<br>87<br>229<br>228<br>219<br>195<br>103<br>37.6 | 248<br>70<br>203<br>199<br>183 | 188<br>185<br>177<br>162<br>141<br>114<br>82.1<br>50.8 | 90.7<br>90.0<br>86.9<br>80.4<br>73.9<br>66.2 | 181<br>181<br>177<br>169<br>158<br>145<br>130<br>114<br>98.4<br>83.7<br>69.1<br>57.3<br>48.4<br>41.4<br>32.7 | 252<br>303<br>426<br>426<br>417<br>395<br>312<br>257<br>211<br>174<br>119<br>103<br>95.3<br>71.7<br>758.2 | 591<br>587<br>552<br>379<br>294<br>245<br>217<br>192<br>166<br>129<br>146<br>129<br>199.6 | 734<br>463<br>730<br>698<br>630<br>515<br>399<br>360<br>260<br>238<br>2166<br>146 | 594<br>592<br>592<br>474<br>360<br>215<br>180<br>151 | G,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>330<br>320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>20<br>210<br>20<br>180<br>170<br>160<br>150<br>160<br>150<br>140 | 234<br>399<br>564<br>562<br>540<br>494<br>427<br>363<br>313<br>279<br>255<br>231<br>208<br>163 | 45.2<br>245<br>431<br>517<br>515<br>502<br>476<br>437<br>338<br>296<br>252<br>235<br>20168 | 45.6<br>260<br>516<br>610<br>610<br>602<br>579<br>5490<br>424<br>357<br>305<br>273<br>252<br>236<br>220<br>199<br>158 | 567<br>567<br>553<br>513<br>450<br>375<br>272<br>243<br>177<br>158 | 38.2<br>255<br>387<br>512<br>510<br>492<br>456<br>341<br>289<br>220<br>193<br>168<br>141<br>123<br>114 | 30.9<br>252<br>345<br>594<br>593<br>571<br>519<br>430<br>332<br>249<br>155<br>128<br>104<br>88.6<br>79.9<br>74.9 | All   | 33.6<br>249<br>87 | A0 247 32-2 318 59 130 128 120 106 85-9 61-7 38-3 16-2 | 35.2<br>314<br>83<br>178<br>177<br>171<br>157<br>136<br>105<br>69.4<br>34.4 | 31.4<br>274<br>82<br>184<br>183<br>175<br>157 | 322<br>84<br>152<br>152<br>148<br>138<br>126<br>111<br>92.7<br>69.4<br>41.2<br>12.4 |

| E 1 | 60 | TO | ONL | O.E. | A1 C 1 | TV |
|-----|----|----|-----|------|--------|----|

#### ELECTRON DENSITY

| RAMEY   | AF8,                                      | PUERTO                          | RICO | )                                |  |              | -                    | 60 W   |   | 25   | NAL 6 | 1962 | RAMEY  | AF8,   | PUERT              | O RIC   | )  |  |  |      | 50 W              |      | 25   | 5 JAN                            | 1962                            |
|---|---|---------------------------------|------|----------------------------------|--|--------------|----------------------|--|---|--|-------|------|--|--|--------------------|---|--|--|--|------|-------------------|------|--|----------------------------------|---------------------------------|
| TIME  | 0000                                      | 0100                            | 0200 | 0300                             | 0400                                     | 0500         | 0600                 | 0700   | 0800  | 0900   | 1000  | 1100 | TIME   | 1200   | 1300               | 1400  | 1500   | 1600   | 1700   | 1800 | 1900              | 2000 | 2100   | 2200                             | 2300                            |
| Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM  | 271<br>32.5<br>337<br>94                  | 237                             | 28.1 | 24.2                             |  | 41.3         | 34.9<br>272          | 110  | 39.2<br>242                                       | 34.2<br>255  | 27.7  | 25.7 | Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM   | 247  | 117<br>48.0<br>276 | 1<br>107<br>39.6<br>256<br>439  | 51.5<br>259  | 34.4<br>256  | 244  | Δ2   | 38.8<br>256       | 219  | 38.5<br>308  | 218<br>30.0<br>286               | F1<br>250<br>43.9<br>347<br>118 |
| 340<br>330<br>320<br>310<br>300<br>290<br>280<br>270<br>260<br>250<br>210<br>200<br>190<br>180<br>170<br>160<br>140<br>130<br>140 | 216<br>202<br>1800<br>147<br>95.9<br>40.1 | 246<br>238<br>217<br>180<br>121 |      | 225<br>215<br>186<br>144<br>85.3 | 157<br>139<br>114<br>77.4<br>38.6<br>3.9 | 71.2<br>55.8 | 75.8<br>40.7<br>12.4 | 173<br>154<br>130<br>103<br>79.2<br>59.1<br>45.9<br>36.6<br>31.7<br>29.1<br>27.7<br>25.8 | 169<br>131<br>105<br>93.0<br>80.6<br>58.3<br>52.4 | 551<br>501<br>427<br>339<br>268<br>220<br>182<br>144<br>121<br>108 | 131   |      | 350 3400 3400 3300 3100 3000 290 2800 2500 2500 2400 2300 1900 1800 1700 1600 1500 1400 1310 | 487<br>484<br>471<br>447<br>414<br>374<br>301<br>274<br>251<br>228<br>168<br>121<br>55.6 |                    | 538<br>520<br>485<br>432<br>374<br>323<br>286<br>259<br>233<br>205<br>179 | 461<br>457<br>445<br>421<br>393<br>317<br>275<br>244<br>218<br>191<br>160<br>135<br>122<br>116<br>75.2 | 645<br>614<br>555<br>463<br>369<br>297<br>249<br>219<br>183<br>163<br>123<br>114 | 619<br>584<br>510<br>410<br>313<br>236<br>188<br>156<br>133<br>111<br>94.0<br>85.9<br>81.7 |      | 233<br>224<br>208 | 31.1 | 258<br>255<br>254<br>224<br>195<br>112<br>72.8<br>41.8<br>16.2 | 270<br>238<br>195<br>132<br>63.3 | 80.8<br>49.8<br>29.2<br>.4      |

|   |  |                                  |                          | ELECTE                           | RON O              | ENSIT                                   | r    |      |      |   |  |   |                    |   |      | Е    | LECT  | RON O   | ENS1T | 4                         |   |                                      |   |                    |
|---|--|----------------------------------|--------------------------|----------------------------------|--------------------|---|------|------|------|---|--|---|--------------------|---|------|------|-------|---|-------|---------------------------|---|--------------------------------------|---|--------------------|
| RAMEY   | AF8, PUERT                                     | O RIC                            | 0                        |                                  |                    |   | 50 W |      | 2    | 6 JAN   | 1962   | RAMEY   | ΔF8, i             | PUERTO  | RICC |      |       |   |       | 50 W                      |   | 26                                   | JAN   | 1962               |
| TIME  | 0000 0100                                      | 0200                             | 0300                     | 0400                             | 0500               | 0600                                    | 0700 | 0800 | 0900 | 1000  | 1100   | TIME  | 1200               | 1300  | 1400 | 1500 | 1 600 | 1700  | 1800  | 1900                      | 2000  | 2100                                 | 2200  | 2300               |
| Q.KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>320<br>310<br>300<br>290                              | 28.5<br>312<br>155<br>348<br>348<br>333<br>297 | 220<br>26.5<br>282<br>146        | 29.6<br>270              | 284<br>134<br>279                | 24.2<br>276<br>105 | 209<br>39.6<br>295<br>154<br>281<br>281 | 52   | 237  | 26.1 | 31.9  | 109<br>34.6<br>215   | Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>340<br>330<br>320<br>310                                    | 107<br>47.9<br>281 | 2<br>108<br>44.8<br>274<br>692  | Α2   | A2   | Α2    | A2<br>109<br>46.2<br>281<br>678   |       | 190<br>31.8<br>255<br>151 | 47.9<br>294<br>91   | 130<br>129<br>124<br>113             | 32.9<br>291<br>75                               | 198<br>39.9<br>283 |
| 280<br>270<br>260<br>250<br>240<br>230<br>220<br>190<br>180<br>170<br>160<br>150<br>140<br>130<br>120 |  | 388<br>339<br>262<br>135<br>47.8 | 439<br>401<br>332<br>199 | 249<br>221<br>180<br>111<br>46.9 |                    |   |      |      |      | 583<br>581<br>559<br>507<br>421<br>330<br>271<br>238<br>209<br>182<br>155<br>134<br>123<br>81-4 | 430<br>428<br>409<br>372<br>326<br>286<br>230<br>194<br>160<br>161<br>59.8 | 300<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>20<br>210<br>200<br>190<br>170<br>160<br>150<br>140 |                    | 817<br>798<br>759<br>699<br>612<br>517<br>431<br>362<br>314<br>285<br>266<br>248<br>231 |      |      |       | 923<br>923<br>911<br>877<br>821<br>742<br>628<br>488<br>276<br>220<br>186<br>161<br>140<br>123<br>108<br>96.6 |       | 352<br>335<br>300<br>246  | 142<br>139<br>133<br>124<br>113<br>97.7<br>78.6<br>56.7<br>34.4 | 98.0<br>78.2<br>57.6<br>38.8<br>22.2 | 178<br>174<br>160<br>140<br>107<br>53.6<br>12.4 | 141                |

|   |   |  |  | 6  | FLECTI  | RON OI  | FNS1T             | Y                 |   |                    |  |      |   |      |       |   | 6    | ELECTR  | ON 01 | ENSIT | Y   |   |  |   |            |
|---|---|--|--|--|---|---|-------------------|-------------------|---|--------------------|--|------|---|------|-------|---|------|---|-------|-------|---|---|--|---|------------|
|   |   |  |  |  |   |   |                   |                   |   |                    |  |      |   |      |       |   |      |   | 0 0.  |       |   |   |  |   |            |
| RAMEY   | AF8,  | PUERTO   | RICO                                   | )  |   |   |                   | 60 W              |   | 27                 | 7 JAN  | 1962 | RAMEY   | AF8, | PUERT | O RICO  | )    |   |       |       | 60 W  |   | 2  | NAL 7   | 1962       |
| TIME  | 0000  | 0100   | 0200                                   | 0300   | 0400  | 0500  | 0600              | 0700              | 0800  | 0900               | 1000   | 1100 | TIME  | 1200 | 1300  | 1400  | 1500 | 1600  | 1700  | 1800  | 1900  | 2000  | 2100   | 2200  | 2300       |
| 0, KP<br>HMIN<br>SCAT<br>HMAXF<br>SHAMX<br>MM<br>3800<br>3700<br>3400<br>3300<br>2900<br>280<br>2700<br>260<br>2200<br>2100<br>200<br>1900<br>180<br>1700<br>1600<br>1700<br>1600<br>1500<br>1600<br>1600<br>1700<br>1600<br>1600<br>1600<br>1600<br>16 | 45.8<br>353<br>91<br>162<br>162<br>159<br>152<br>142<br>125<br>102<br>68.4<br>36.3<br>4.7 | 240<br>40.6<br>319<br>113<br>214<br>211<br>202<br>186<br>165<br>137<br>96.0<br>49.0<br>3.1 | 21.5<br>256<br>76<br>247<br>242<br>212 | 194<br>193<br>190<br>183<br>173<br>158<br>136<br>108<br>75.9<br>42.6 | 34.4<br>325<br>91<br>195<br>194<br>185<br>168 | 41.0<br>376<br>93<br>163<br>163<br>158<br>147<br>133<br>114 | 34.2<br>301<br>81 | 215<br>213<br>203 | 239<br>249<br>442<br>433<br>400<br>345<br>202<br>151<br>119<br>97.7<br>85.0 | 39.8<br>247<br>359 | 678<br>678<br>678<br>675<br>653<br>661<br>550<br>476<br>398<br>329<br>277<br>243<br>216<br>188 |      | Q,KP<br>HMIN<br>SCAT<br>HMAXF<br>SHMAX<br>MM<br>3300<br>320<br>3100<br>2900<br>2500<br>2500<br>2400<br>2500<br>1900<br>1900<br>180<br>170<br>160<br>150<br>160<br>110 | Al   | Al    | A2<br>110<br>44.6<br>265<br>621<br>804<br>738<br>801<br>738<br>804<br>801<br>738<br>466<br>309<br>229<br>207<br>184<br>12.4 | Α2   | 744<br>739<br>717<br>7678<br>613<br>343<br>281<br>236<br>431<br>236<br>180<br>157<br>139<br>123<br>123<br>124 | АЗ    | АЗ    | 267<br>128<br>257<br>255<br>247<br>232<br>209 | 50.2<br>325<br>108<br>160<br>159<br>156<br>150<br>141<br>127<br>109<br>87.8<br>65.9<br>47.7<br>32.2 | 36-3<br>314<br>105<br>206<br>205<br>198<br>183<br>161<br>127<br>90-1<br>58-6<br>34-5<br>15-8 | 37.7<br>324<br>117<br>243<br>242<br>235<br>218<br>194<br>160<br>105<br>43.9 | 290<br>129 |

|   |  |   |                                 | - 1                                    | LECTA                    | ON DE                                  | NSIT                               | r    |   |   |  |      |   |   |                                 |                          |   | ELECT                    | RON OF  | ENSIT   | Y                   |      |                           |  |
|---|--|---|---------------------------------|--|--------------------------|--|------------------------------------|------|---|---|--|------|---|---|---------------------------------|--------------------------|---|--------------------------|---|---|---------------------|------|---------------------------|--|
| RAMEY   | AF8,                                   | PUERT(                                  | RICO                            | )                                      |                          |  |                                    | 50 W |   | 24  | B JAN  | 1962 | KAMEY   | AF8,  | PUERT                           | RIC                      | )   |                          |   |   | 50 W                |      | 28 JA1                    | 1962   |
| TIME  | 0000                                   | 0100                                    | 0200                            | 0300                                   | 0400                     | 0500                                   | 0600                               | 0700 | 0800  | 0900  | 1000   | 1100 | TIME  | 1200  | 1300                            | 1400                     | 1500  | 1600                     | 1700  | 1800  | 1900                | 2000 | 2100 2200                 | 2300   |
| O.KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>330<br>320                | 48.6                                   | 253                                     | 32.5<br>305                     | 35.7<br>305                            |                          |  |                                    |      | 30.9  | 33.4  | 109<br>46.2<br>266   |      | O,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>300<br>290                | 241   |                                 | 52.7<br>276<br>577       | 268   | 29.8<br>248              | 36.7<br>261   | 29.5<br>251   | 200<br>36.7<br>277  |      | 236<br>31.8<br>295<br>106 | 204<br>3 40.5<br>5 284<br>5 122                |
| 310<br>300<br>290<br>280<br>270<br>260                                    | 223<br>218<br>208<br>194<br>176<br>155 | 245<br>226<br>199<br>163<br>120<br>78.4 | 337<br>321<br>290<br>239<br>165 | 346<br>344<br>331<br>303<br>263<br>202 | 302<br>285<br>257<br>216 | 284<br>275<br>255<br>226<br>191<br>151 | 170<br>170<br>165                  |      |   |   | 740<br>737   |      | 280<br>270<br>260<br>250<br>240<br>230                                    | 713<br>687  |                                 | 566<br>544<br>511<br>4/2 | 779<br>771<br>741<br>686<br>603   | 734<br>679               | 732<br>688<br>616   | 572<br>572<br>554<br>502  | 233<br>202<br>165   |      | 255<br>228<br>176<br>103  | 3 234<br>3 227<br>5 213<br>192<br>0 161<br>118 |
| 250<br>240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150 | 95.3<br>61.3<br>35.6                   |   |                                 | 12.4                                   |                          | 42.7                                   | 152<br>131<br>94.4<br>47.0<br>16.5 |      | 428<br>424<br>399<br>352<br>282<br>218<br>166<br>130<br>105<br>89.0<br>80.4<br>71.8 | 567<br>565<br>542<br>495<br>421<br>342<br>280<br>233<br>196<br>167<br>141<br>122<br>109 | 626<br>535<br>442<br>362<br>303<br>264<br>238<br>213<br>189<br>164 |      | 220<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130<br>120 | 621<br>519<br>423<br>355<br>309<br>276<br>248<br>219<br>185<br>148<br>135 | 403<br>345<br>306<br>277<br>254 | 139                      | 504<br>407<br>337<br>291<br>262<br>240<br>219<br>196<br>167<br>138<br>126<br>33.3 | 147<br>125<br>113<br>106 | 384<br>283<br>217<br>175<br>148<br>128<br>113<br>98.7<br>85.9<br>76.2 | 164<br>95.0<br>67.1<br>52.2<br>42.6<br>38.0<br>35.6<br>34.5<br>31.5 | 119<br>69.9<br>12.4 |      |                           | 65.3<br>28.0                                   |
| 120<br>110  |  |   |                                 |  |                          |  |                                    |      | 65 • 1<br>12 • 4  |   |  |      |   |   |                                 |                          |   |                          |   |   |                     |      |                           |  |

ELECTRON GENELLA

| RAMEY   | AF8.  | PUERTO | RICO                                     | )                        |      |                                 | (  | 50 W   |      | 29  | NAL (  | 1962 | RAMEY   | AF8, | PUERT  | 0 R1C       |  |      |  |      | 60 ¥   |            | 29                                | JAN   | 1962        |  |
|---|---|--------|--|--------------------------|------|---------------------------------|--|--|------|---|--|------|---|------|--|-------------|--|------|--|------|--|------------|-----------------------------------|---|-------------|--|
| TIME  | 0000  | 0100   | 0200                                     | 0300                     | 0400 | 0500                            | 0600   | 0700   | 0800 | 0900  | 1000   | 1100 | TIME  | 1200 | 1300   | 1400        | 1500   | 1600 | 1700   | 1800 | 1900   | 2000       | 2100                              | 2200  | 2360        |  |
| Q,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>330<br>320<br>310                                     | F3<br>219<br>37.2<br>313<br>111<br>191<br>191<br>186    |        | F1<br>233<br>32.5<br>306<br>125          | 230<br>28.0<br>282<br>99 |      | 280                             | 2<br>201<br>45.7<br>300<br>130                                 | \$2<br>115<br>35.6<br>271<br>158   | Α3   | 108   | 3<br>109<br>49.1<br>289<br>786   | Δ1   | Q,KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAX<br>KM<br>310<br>300<br>290<br>280                              | ΑI   | 109  | 35.8<br>257 | A0<br>109<br>39.3<br>253<br>479  | 263  |  | Α2   | 282  | 39.2       | 300                               | \$3<br>199<br>37.7<br>291<br>156<br>284<br>284<br>278 | 40.6<br>306 |  |
| 290<br>280<br>270<br>260<br>250<br>240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150 | 172<br>157<br>139<br>119<br>91.6<br>56.8<br>31.1<br>6.4 |        | 266<br>238<br>198<br>140<br>73.5<br>31.1 | 239<br>184               |      | 319<br>307<br>273<br>221<br>141 | 203<br>196<br>184<br>167<br>146<br>122<br>94.1<br>61.0<br>31.0 | 259<br>259<br>253<br>235<br>209<br>176<br>139<br>102<br>72-9<br>52-6<br>38-7<br>30-7<br>26-5<br>24-3<br>23-0 |      | 575<br>572<br>551<br>506<br>454<br>388<br>325<br>270<br>226<br>192<br>164<br>1425 | 923<br>916<br>890<br>843<br>781<br>688<br>575<br>468<br>380<br>321<br>282<br>256<br>236<br>215<br>191<br>166 |      | 270<br>250<br>250<br>240<br>230<br>220<br>210<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130 |      | 1110<br>1083<br>997<br>859<br>676<br>503<br>387<br>325<br>289<br>263<br>242<br>218<br>188<br>161 |             | 648<br>647<br>631<br>595<br>536<br>455<br>317<br>275<br>248<br>226<br>196<br>154<br>135<br>127<br>30.3 | 118  | 539<br>526<br>493<br>440<br>376<br>302<br>238<br>191<br>157<br>132<br>97.9<br>91.8<br>78.2 |      | 552<br>519<br>465<br>377<br>269<br>139<br>50.4 | 405<br>386 | 214<br>157<br>99.6<br>43.2<br>3.1 | 263<br>237<br>205<br>164<br>117<br>79.6               |             |  |
| 120<br>110  |   |        |  |                          |      |                                 |  | 17.9   |      | 109   | 124  |      |   |      |  |             |  |      |  |      |  |            |                                   |   |             |  |

| RAMEY AFB, PUERTO RICO 60 N 30 JAN 1962 RAMEY AFB, PUERTO RICO 60 W 30 JAN 1 TIME 0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 TIME 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2  | ELECTRON DENSITY                                      |
|--|---|
| TIME 0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100  TIME 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2  Q,KP 2 2 2 A2 2 2 2 2 2 2 2 2 Q,KP 2 2 1 1 A1  | LECTRON DENSITY                                       |
| 0, KP 2 2 2 2 A2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 60 W 30 JAN 1962                                      |
| HMIN   222   219   221   209   227   233   219   108   107   108   107   108   108   107   108   108   107   108   108   107   108   108   107   108 | 1600 1700 1800 1900 2000 2100 2200 2300               |
| 180  | Al Al Al Al I S1 S1 1 S1 S |

| ELECTRON DENSITY | ELECTRON DENSITY |
|------------------|------------------|

| RAMEY  | ΔF8.  | PUERTO   | RICO                            | )  |  |  | (  | 50 W       |  | 3 1  | JAN  | 1962                     | RAMEY   | AFB,  | PUERT   | 0 R1C  | )   |  |  |   | 50 W  |   | 31   | JAN  | 1962                           |
|--|---|--|---------------------------------|--|--|--|--|------------|--|--|--|--------------------------|---|---|---|--|---|--|--|---|---|---|--|--|--------------------------------|
| TIME   | 0000  | 0100   | 0200                            | 0300   | 0400   | 0500   | 0600   | 0700       | 0800   | 0900   | 1000   | 1100                     | TIME  | 1200  | 1300  | 1400   | 1500  | 1600   | 1700   | 1800  | 1900  | 2000  | 2100   | 2200   | 2300                           |
| Q, KP<br>HM1N<br>SCAT<br>HMAXF<br>SHMAXF<br>&M<br>330<br>320<br>310<br>300<br>290<br>270<br>260<br>250<br>240<br>230 | 230<br>35.2<br>321<br>115<br>215<br>210<br>195<br>174<br>150<br>119 | 1<br>259<br>30.0<br>319<br>91<br>236<br>231<br>211<br>179<br>126<br>54.4 | F0<br>239<br>28.2<br>307<br>106 | F0<br>228<br>30.0<br>292<br>94<br>234<br>234<br>225<br>203<br>171<br>119 | 201<br>36.7<br>281<br>109<br>224<br>224<br>219<br>205<br>184<br>151<br>109 | F0<br>209<br>41.1<br>278<br>84<br>170<br>168<br>161<br>149<br>134<br>109<br>55.9 | 0<br>216<br>37.6<br>291<br>65<br>129<br>129<br>126<br>118<br>107<br>72.0<br>70.5<br>44.0 | 0700<br>S0 | 0<br>108<br>30.0<br>228<br>237   | 0<br>108<br>35.8<br>241<br>357<br>531<br>531<br>531<br>520<br>486          | 0<br>105<br>34.1<br>243<br>434<br>645<br>643<br>620<br>571                 | 704<br>703<br>682<br>627 | Q k P<br>HM IN<br>SCAT<br>HMAXF<br>SHMAX<br>320<br>310<br>290<br>280<br>270<br>260<br>250<br>240<br>230<br>220<br>210 | 0<br>108<br>37.4<br>237<br>426<br>594<br>588<br>561<br>515          | 0<br>107<br>58.8<br>264<br>563<br>594<br>593<br>586<br>570<br>545<br>513<br>468 | 0<br>108<br>36.4<br>235<br>406                       | 0<br>109<br>44.4<br>261<br>546<br>701<br>700<br>690<br>662<br>619<br>619<br>6542<br>451 | 0<br>109<br>40-2<br>255<br>436<br>581<br>563<br>527<br>474 | A0<br>109<br>35.9<br>250<br>382<br>607<br>596<br>561<br>503<br>419 | \$0<br>110<br>24-3<br>244<br>255<br>602<br>597<br>5456<br>322 | 0<br>200<br>27.5<br>247<br>110<br>325<br>320<br>295<br>245<br>155 | 0<br>206<br>48.6<br>311<br>132<br>195<br>195<br>195<br>192<br>185<br>174<br>159 | 0<br>229<br>38.5<br>316<br>109<br>206<br>205<br>197<br>183<br>161<br>133<br>97.9<br>59.4<br>33.4 | F0<br>240<br>27.8<br>306<br>90<br>229<br>226<br>209<br>181<br>139<br>84.2<br>40.6<br>3.9 | F0<br>211<br>26.9<br>274<br>85 |
| 210<br>200<br>190<br>180<br>170<br>160<br>150<br>140<br>130<br>120   |   |  |                                 |  | 31.0   | 12-4   |  |            | 391<br>335<br>265<br>198<br>147<br>116<br>96.6<br>88.1<br>77.3<br>62.1<br>37.6 | 435<br>365<br>294<br>241<br>205<br>176<br>152<br>132<br>121<br>103<br>60.4 | 484<br>393<br>323<br>273<br>238<br>209<br>182<br>156<br>137<br>128<br>99.4 |                          | 200<br>190<br>180<br>170<br>160<br>150<br>140<br>130  | 442<br>368<br>312<br>278<br>254<br>229<br>198<br>157<br>140<br>81.5 | 409<br>355<br>312<br>279<br>252<br>229<br>205<br>171<br>142<br>121              | 370<br>312<br>271<br>245<br>225<br>204<br>176<br>152 | 367<br>306<br>266<br>238<br>216<br>193<br>169<br>153<br>132<br>57.7                     | 121  | 160  | 115<br>80.7<br>63.4<br>53.6<br>45.8<br>39.9<br>36.7<br>33.7   | 31.1  |   |  |  |                                |

| . 5              | 29               | 2300                | 29<br>1.1<br>2214<br>6.8<br>6.8<br>18.2<br>180<br>292<br>91  | 11.2<br>11.2<br>116.4<br>23.6<br>23.6<br>38.7<br>49.4<br>62.9<br>79.4  | 112  |
|------------------|------------------|---------------------|--|--|--|
| BELOW 4.         | JAN 1962         |                     | 171  |  | 9 9 4 7/   |
| 961              | 'n               | 0 2200              | 29<br>220<br>220<br>7.5<br>220<br>220<br>220<br>219<br>220<br>240<br>26<br>26<br>26<br>26<br>26<br>27<br>27<br>28<br>26<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27<br>27  |  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| ¥                |                  | 2100                | 29<br>11.3<br>225<br>7.0<br>36.6<br>200<br>302<br>302<br>95  | 12.8<br>16.5<br>21.1<br>27.1<br>27.1<br>24.7<br>44.7<br>44.7<br>172.1<br>114<br>114  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |
|                  |                  | 2000                | 29<br>1.3<br>215<br>6.3<br>6.3<br>42.1<br>189<br>297<br>297<br>6337  | 11.9<br>15.3<br>19.7<br>25.2<br>32.3<br>41.4<br>52.8<br>67.1<br>106<br>130   | 10000000000000000000000000000000000000   |
|                  | M 09             | 1900                | 28<br>1-3<br>199<br>7-6<br>35-2<br>267<br>265<br>265<br>117<br>870   | 14.3<br>18.4<br>23.6<br>23.6<br>30.3<br>38.8<br>49.7<br>649.7<br>649.0<br>103<br>103<br>103  | 1089<br>1175<br>1189<br>1189<br>1189<br>1189<br>1189<br>1189<br>1189<br>118  |
| SITY             | 9                | 1800                | 8<br>1111<br>7-1<br>29-7<br>529<br>249<br>247<br>1740  | 26.4<br>33.9<br>33.9<br>43.5<br>55.8<br>71.6<br>91.7<br>150<br>190<br>240<br>301   | 314<br>327<br>327<br>335<br>335<br>335<br>335<br>335<br>337<br>301<br>301<br>301<br>301<br>301<br>301<br>301<br>301<br>301<br>301  |
| ELECTRON DENSITY |                  | 1700                | 20<br>109<br>109<br>5.5<br>36.5<br>255<br>255<br>278   | 30.6<br>39.2<br>39.2<br>50.3<br>50.3<br>106<br>1136<br>1173<br>220<br>227<br>346   | 3346<br>3376<br>4008<br>4408<br>4440<br>4440<br>4440<br>4440<br>4440<br>444  |
| CIRON            |                  |                     | 25<br>11.0<br>109<br>55.1<br>56.7<br>56.7<br>56.7<br>256.1   |  | 333382<br>33552<br>33652<br>33652<br>33652<br>33652<br>33652<br>33652<br>33652<br>33652<br>3562<br>3662<br>36  |
|                  |                  | 1500 1600           | 24<br>108<br>5.0<br>5.0<br>583<br>248<br>418   |  | 3364<br>3364<br>3364<br>3364<br>3364<br>3364<br>3364<br>3669<br>3669   |
| VERAGE           | 0.01             | 1400 1              | 23<br>109<br>4.7<br>41.7<br>254<br>485<br>2283 2   |  | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4  |
| Á                | PUERTO RICI      | 1300 1              | 18<br>1.09<br>1.09<br>4.06<br>4.20<br>6.53<br>6.53<br>6.53<br>6.53<br>6.53<br>6.53<br>6.53<br>6.53   |  | 144444   |
|                  |                  |                     |  |  | 3 3 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |
|                  | AMEY AFB,        |                     | 108<br>108<br>5.0<br>37.9<br>37.9<br>527<br>238<br>394   |  |  |
|                  | RAMEY            | TIME                | KP<br>HMIN<br>RATIO<br>SCAT<br>NMAX<br>HMAXF   | KM<br>950<br>900<br>850<br>800<br>750<br>750<br>750<br>650<br>650<br>650<br>650<br>650   | 430<br>430<br>430<br>430<br>430<br>430<br>430<br>430<br>430<br>430   |
|                  |                  |                     |  |  |  |
| 4 . 5            | JAN 1962         | 1100                | 19<br>1.4<br>1.08<br>5.6<br>32.9<br>605<br>231<br>231  | 27.9<br>35.8<br>465.9<br>58.9<br>96.9<br>124<br>158<br>202<br>255  | 334<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4411<br>4 |
| 8ELOW            | JAN              | 1000                | 26<br>108<br>108<br>5.8<br>30.5<br>688<br>239<br>411   |  | 44444444444444444444444444444444444444   |
| Α.               |                  | 0060                | 24<br>108<br>108<br>5.6<br>570<br>241<br>347   | 27.3<br>35.0<br>44.9<br>57.6<br>67.9<br>121<br>121<br>155<br>197<br>24.9   | 3326<br>3346<br>3346<br>3346<br>3346<br>3346<br>3346<br>3346   |
|                  |                  | 0 0080              | 28<br>1.2<br>110<br>5.9<br>33.1<br>418<br>237<br>244<br>1423 1   |  | 223 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |
|                  | 36               | 0 0010              | 9<br>108<br>5.4<br>5.4<br>106.7<br>255<br>1127<br>681 1  | 100-1 1<br>100-1 | 1135 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
| 7                | 9                | 0 0090              | 29<br>213<br>2213<br>66-7<br>77-8<br>177<br>177<br>90<br>90  |  | 0.1201 0.1111  |
| OENSITY          |                  | 9                   |  |  | 111111111111111111111111111111111111111  |
|                  |                  |                     | Pi   | 2 11.0<br>1 14.1<br>2 18.1<br>2 29.2<br>3 29.2<br>4 48.5<br>7 48.5<br>2 61.7<br>2 78.0<br>3 78.0<br>3 78.0   | 251  |
| RON              |                  | 0050                | 29<br>1-3<br>221<br>6-8<br>36-6<br>191<br>298<br>93  | 12.2<br>15.6<br>20.0<br>25.7<br>32.9<br>42.1<br>68.2<br>108  | 137<br>152<br>152<br>152<br>162<br>163<br>164<br>164<br>164<br>164<br>165<br>165<br>165<br>165<br>165<br>165<br>165<br>165<br>165<br>165   |
| ELECTRON         |                  | 0400 0200           | 30 29<br>1.2 1.3<br>220 221<br>7.7 6.8<br>33.4 36.6 3<br>203 191<br>286 298<br>88 93   | 15.2 12.2<br>20.2 20.0<br>20.2 20.0<br>33.1 32.9<br>42.4 42.1<br>54.1 53.7<br>64.9 68.2<br>87.1 86.2<br>109 108  | 140 137 151 152 152 153 153 153 153 153 153 153 153 153 153  |
| ELECTRON         | 0                | 0300 0400 0500      | 29 30 29<br>220 222 22<br>8-3 7-7 6-8<br>31-0 33-4 36-6<br>281 286 298<br>98 89 93   | 14.4 12.2 12.2<br>18.5 15.7 15.0<br>30.5 25.0 25.0<br>30.5 25.0 25.7<br>30.0 42.4 42.1<br>63.9 45.1 32.9<br>63.0 42.4 42.1<br>10.3 17.1 68.2<br>11.3 68.9 68.2<br>11.3 17.1 68.2<br>11.2 17.1 17.1 17.1 17.1 17.1 17.1 17.1  | 100 140 137 145 145 145 145 145 145 145 145 145 145  |
| AVERAGE ELECTRON | 0 R1C0           | 0200 0300 0400 0500 | 31 29 30 29<br>228 220 221<br>23 220 221<br>7-7 8-3 7-7 6-8<br>32-8 31-0 33-4 3-6<br>248 21-0 33-4 3-6<br>25-7 281 286 298<br>805 795 662 833 | 15.2 12.2<br>20.2 20.0<br>20.2 20.0<br>33.1 32.9<br>42.4 42.1<br>54.1 53.7<br>64.9 68.2<br>87.1 86.2<br>109 108  | 140 137 151 152 152 153 153 153 153 153 153 153 153 153 153  |
| ELECTRON         | UERTO RICO       | 0300 0400 0500      | 29 30 29<br>220 222 22<br>8-3 7-7 6-8<br>31-0 33-4 36-6<br>281 286 298<br>98 89 93   | 14.4 12.2 12.2<br>18.5 15.7 15.0<br>30.5 25.0 25.0<br>30.5 25.0 25.7<br>30.0 42.4 42.1<br>63.9 45.1 32.9<br>63.0 42.4 42.1<br>10.3 17.1 68.2<br>11.3 68.9 68.2<br>11.3 17.1 68.2<br>11.3 17.1 18.2<br>11.3 17.1 18.2<br>11.3 17.1 18.2   | 100 140 137 145 145 145 145 145 145 145 145 145 145  |
| ELECTRON         | AF8, PUERTO RICO | 0200 0300 0400 0500 | 31 29 30 29<br>228 220 221<br>23 220 221<br>7-7 8-3 7-7 6-8<br>32-8 31-0 33-4 3-6<br>248 21-0 33-4 3-6<br>25-7 281 286 298<br>805 795 662 833 | 15.6 14.4 12.2 12.2<br>25.0 23.8 20.2 20.0<br>32.9 30.5 25.9 25.7<br>42.1 39.0 33.1 32.9<br>53.9 50.0 42.4 42.1<br>68.7 63.7 54.4 42.1<br>110 103 87.1 62.2<br>110 128 129 109 108<br>128 129 109 108<br>129 109 108   | 170   160   140   137   140   137   140   137   140   137   140   140   137   140   140   137   140  |



ABLE

TABLE

TABLE TABLE 3 35 77

36 6 6 9 5

35 g 10 10 20

42 44 31

6.75 24 78 4.9

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54 54

290 305 280

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320 300

20 310 290

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|   | HOUR  | 10 F 2                                      | h° F2                    | <u>L</u><br>E                                  | (M3000) F2                             | fo F :  | ₹o E | ъ.<br>Е | % Es  |
|---|-------|---|--------------------------|--|--|---------|------|---------|-------|
|   | α     | MEO<br>CNT<br>UD                            | MED<br>CNT<br>UO         | ME<br>CNN<br>CNN                               | F2 MED<br>CNT<br>UG                    | CNT     | MEO  | MED     | MED   |
| HUA                                       | 00    | 7 7 2 5 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | DE GG                    | 215<br>220<br>7 220<br>2 210                   | 325<br>0 325<br>0 330<br>0 320         | 0.5     | 0.   | 0.5     | D 28  |
| NCATG                                     | ō     | 297   |                          | 220<br>29<br>29<br>20<br>225<br>0 225<br>0 210 | 325<br>24<br>23<br>330<br>320          |         |      |         | 8 28  |
| HUANCATO. PERU 112.05. 75.3WI             | 05    | 297   |                          | 230<br>29<br>29<br>5 235<br>0 220              | 320<br>320<br>335<br>335<br>335        |         |      |         | 28    |
| 30 112                                    | 0.3   | 290   |                          | 240<br>29<br>29<br>5 250<br>0 230              | 0 320<br>7 25<br>5 330<br>5 310        |         |      |         | 8 28  |
| *00                                       | 0.4   | 4524  |                          | 255<br>27<br>275<br>0 275<br>0 240             | 315 24 24 330 330                      |         |      |         | 50    |
| 75.3W                                     | 0.5   | 222   |                          | 260<br>250<br>290<br>290<br>290                | 315                                    |         |      |         | 2.8   |
| =   | 90    | 272   |                          | 265<br>28<br>270<br>270<br>260                 | 310<br>315<br>315<br>300               |         | 150  | 16      | 36    |
|   | 20    | 76<br>29<br>82<br>68                        |                          | 230<br>235<br>235<br>230                       | 315                                    |         | 250  | 27      | 278   |
|   | 90    | 90 53 84                                    | 280<br>280<br>290<br>270 | 215<br>29<br>220<br>220<br>215                 | 290<br>29<br>300<br>275                |         | 300  | 110     | 75    |
|   | 8     | 93<br>29<br>102<br>86                       | 310                      | 210<br>29<br>210<br>210<br>205                 | 260<br>29<br>270<br>255                | м       | 335  | 109     | 78    |
|   | 0     | 895<br>28<br>100<br>82                      | 325<br>13<br>340<br>300  | 200<br>200<br>200<br>200                       | 255<br>28<br>270<br>250                | 470     | 360  | 106     | 7.8   |
|   | =     | 5 84<br>27<br>27<br>89<br>78                | 340<br>360<br>325        | 200<br>200<br>200<br>199                       | 245 27 245 245 245                     | 15      | 370  | 105     | 80    |
|   | 12    | 877   | 355<br>360<br>340        | 195<br>27<br>200<br>190                        | 245<br>27<br>255<br>245                | 0 6     | 380  | 107     | 27    |
|   | 5     | 82<br>27<br>90<br>80                        | 3475<br>10<br>365<br>315 | 195<br>195<br>190                              | 245<br>27<br>250<br>240                | 15      | 370  | 105     | 80    |
|   | 4     | 87<br>92<br>82                              | 340                      | 190<br>28<br>195<br>195                        | 250<br>28<br>260<br>240                | 999     | 360  | 105     | 90    |
|   | 2     | 8 7 7<br>0 7 7<br>0 8 8                     | 2                        | 190<br>200<br>190                              | 250<br>28<br>260<br>240                | 2       | 330  | 105     | 7.9   |
|   | 9     | 28 9 2 8 9                                  |                          | 200<br>202<br>205<br>195                       | 250<br>28<br>260<br>245                |         | 290  | 109     | 76    |
|   |       | 0     |                          | 240<br>245<br>235                              | 250<br>28<br>260<br>245                |         | 245  | 111 28  | 285   |
|   | 8     | 88<br>29<br>95<br>81                        |                          | 270<br>270<br>270<br>265                       | 260<br>29<br>270<br>250                |         | 145  | 100     | 5 43  |
|   | 6     | 775<br>26<br>89<br>72                       | ч                        | 340  | 245 250 240 240                        |         |      |         | 28    |
|   | 50    | 10 10 10 10 10 10 10 10 10 10 10 10 10 1    |                          | 3325<br>18<br>365<br>295                       | 260<br>15<br>270<br>255                |         |      |         | 27    |
|   | 21    | 785<br>18<br>84<br>75                       |                          | 5 270<br>18<br>270<br>240                      | 280<br>17<br>290<br>270                |         |      |         | 5.6   |
| E<br>==================================== | 2.2   | 5 80<br>20<br>36<br>74                      |                          | 230 240 240 220                                | 300<br>16<br>310<br>295                |         |      |         | 53    |
| 75.0W                                     | 23    | 76<br>23<br>70                              |                          | 215<br>220<br>220<br>210                       | 320<br>21<br>330<br>315                |         |      |         | 5.8   |
| 34  | _     |   |                          |  |  |         |      |         |       |
|   |       | to F2                                       | h' F2                    | in.  | (M30                                   | \$<br>E | 9 E  | ш<br>"ב | fo Es |
|   | HOUR  |   |                          |  | (M3000) F2                             |         |      |         |       |
|   | П     | CNT   | CNT                      | CNT  | SS CS CS                               | MED     | MEO  | MED     | MED   |
| POINT                                     | 00    | 24<br>48<br>26                              |                          |  | 300                                    |         |      |         | 585   |
| BARR                                      | ō     | 39 29 29                                    |                          |  | 290                                    |         |      |         | 2.5   |
| O.W.                                      | 20    | 0,0 4,0                                     |                          |  | 275<br>275<br>300<br>250               |         |      |         | 44.0  |
| POINT BARROW, ALASKA (71,3N, 156.8W)      | 03    | 299   |                          |  | 280                                    |         |      |         | 375   |
| (71,                                      | 0.4   | 0144  |                          |  | 260<br>260<br>285<br>250               |         |      |         | 2 S S |
| 3N. 15                                    | 90    | 38 45 33                                    |                          |  | 260                                    |         |      |         | 26    |
| W 8 e 9                                   | 90    | 0 4 4 8 8                                   |                          |  | 285 2 265 2                            |         |      |         | 32    |
|   | 07 (  | 32 0 0                                      |                          |  | 2579 2<br>2570 2<br>270 2<br>230 2     |         |      |         | 35    |
|   | 88    | 39 U  |                          |  | 2725 2<br>275 2<br>275 2<br>260 2      |         |      |         | 35    |
|   | 60    | 0<br>425<br>14<br>49<br>36                  |                          |  | 280 2<br>13 295 3                      |         |      |         | 35    |
|   | 0     | 505<br>20<br>38                             |                          |  | 295 3<br>18<br>305 3<br>275 2          |         |      |         | 31    |
|   | 11 12 | 199 199 199 199 199 199 199 199 199 199     |                          |  | 300 300<br>19 19<br>305 305<br>290 290 |         |      |         | 22    |
|   | 5     | 60 66<br>74 81<br>45 54                     |                          |  | 3000                                   |         |      |         | 21 21 |

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

SEPTEMBER. 1961

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONOS.

NOVEMBER, 1960

| 0  |  |
|----|--|
| -0 |  |
|    |  |
|    |  |
|    |  |

| 2          |  | _  |  |  |   |   |             |            |          |   |  |
|------------|--|--|--|--|---|---|-------------|------------|----------|---|--|
|            | TIME 45.0W                             | 23   | 405<br>8<br>50<br>33   |  |   | 300   |             |            |          | 23  | NOVEMBER: 1960                           |
|            | T1ME                                   | 22   | 36 27 30 30  |  |   | 290<br>290<br>280   |             | }          |          | 23  | MBER                                     |
|            | _                                      | -2   | 0 46<br>7 48<br>34   |  |   | 275<br>275<br>285<br>265  |             |            |          | 38  | NOVE                                     |
|            |  | 20   | 0 4 7 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |  |   | 285<br>290<br>260   |             |            |          | 25  |  |
|            |  | -61  | 0 47<br>60<br>38   |  |   | 285<br>290<br>270   |             |            |          | 33  |  |
|            |  | 8  | 50<br>13<br>58<br>40   |  |   | 295<br>11<br>310<br>275   |             |            |          | 233   |  |
|            |  | 12   | 0<br>64<br>11<br>78<br>49  |  |   | 0<br>295<br>310<br>280  |             |            |          | 34  |  |
|            |  | 9  | U 72<br>15<br>92<br>64   |  |   | 3125<br>3125<br>315<br>305  |             | 2          | е.       | 23  |  |
|            |  | 5  | 0 84<br>17<br>98<br>70   |  | _                                       | 315<br>315<br>325<br>310  |             | 2          | 2        | 2.1   |  |
|            |  | 4  | 0 0<br>81<br>19<br>97<br>71  |  |   | 320 3   |             | -          | -        | 21  |  |
|            |  | i.   | 0 0<br>82<br>23<br>101<br>75   |  |   | 23 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3  | Ì           | ~          | -        | 23  |  |
|            |  | -21  | 82<br>24<br>24<br>98<br>1  |  |   | 305 3<br>24<br>315 3  |             |            | М        | 24  |  |
| 9          |  | =  | 900 274  |  |   | 305<br>23<br>310<br>300   |             |            |          | 23  |  |
| TABLE      |  | 0  | 69<br>23<br>78<br>60   |  |   | 310 30<br>23 3<br>320 31  |             |            | -        | 23  |  |
| TA         |  |  | 585 6<br>22 2<br>69 7<br>51 6  |  |   | 3125 31<br>22 2<br>320 32<br>295 30   |             | -          | -        | 22 2  |  |
|            |  | 8  | 0 495 5<br>20 2<br>54 6  |  |   | 3075 31<br>16 2<br>315 32<br>300 29   |             | -          |          |   |  |
|            | _                                      | 90   | 24000  |  |   |   |             |            |          | 30 21   | • 50                                     |
|            | M 5 . 5                                | 07   | 5 38   |  |   | 290<br>290<br>295<br>295<br>295   |             |            |          | 395 3   | SECON                                    |
|            | 2N + 4                                 | 8  | 365  |  |   | 300   |             |            |          |   | 50                                       |
|            | NARSSARSSUAD. GREENLAND 161.2N. 45.4WI | 0.5  | 2 39   |  |   | 290<br>290<br>290<br>285  |             |            |          | 5 40  | SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONOS. |
|            | NLAND                                  | 8  | 365  |  |   | 285<br>270  |             |            |          | 465   | 0.<br>M                                  |
|            | GREE                                   | 03   | 0 0 0 1  |  |   |   |             |            |          | 19  | 10 25                                    |
|            | SUAGe                                  | 8  | 0 39<br>38<br>38   |  |   | 280<br>270  |             |            |          | 5 33  | ¥  |
|            | SARS                                   | ō  | 0,425<br>4,8<br>3,8<br>3,8   |  |   | 280   |             |            |          | 345   | 1 0                                      |
|            | NAR                                    | 00   | 0 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |  |   | 285<br>275  |             |            |          | 30  | SWE                                      |
|            |  |  | CNT  | CNT                                    | CNT                                     | CNT   | CNT         | MED        | MEO      | MEO   |  |
|            |  | HOUR   |  |  |   | (M3000)F2   |             |            |          |   |  |
|            |  |  | fo F2  | h' F2                                  | <u>.</u>                                | (M30  | fo FI       | 5<br>E     | -E       | fo Ee   |  |
|            |  |  |  |  |   |   |             |            |          |   |  |
| 0          |  | 23   | 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  |   |   |             | - 1        |          |   | 096                                      |
| 4          |  |  |  |  |   |   |             | - 1        |          | 67  | -  |
| E L        | 1                                      |  |  |  |   | 4<br>900<br>285   |             |            |          | 20 1  | 3ER + 1                                  |
| TIME 45.0H |  | 22   | 36 8 8 8   |  |   | 5025<br>605 300<br>805 285  |             |            |          |   | JOVEMBER. 1                              |
| TME        | 1                                      | 21 22  | 0 0 0 111 8 8 60 50 58 66 36   |  |   | 3025  |             |            |          | 50  | NOVEMBER: 1960                           |
| HWI F      |  | 20 21 22   | 52 48 50<br>9 11 8<br>66 60 58<br>43 46 36   |  |   | 300 305<br>285 295  |             |            |          | 30 20   | NOVEMBER. 1                              |
| EW I       |  | 19 20 21 22  | 525 52 48 50<br>14 9 11 8<br>50 66 50 58<br>46 43 46 36  |  |   | 290 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |             |            |          | 25 24 23 20   | NOVEMBER. 1                              |
| H          | 1                                      | 20 21 22   | 47 525 52 48 50<br>11 14 9 11 8<br>63 06 60 58<br>41 46 43 46 58                                       |  |   | 0 0 3025<br>4 10 6 6<br>300 300 305<br>295 285 285 295                                      |             |            |          | 20 25 24 23 20  | NOVEMBER. 1                              |
| 2 -        |  | 17 18 19 20 21 22  | 0 495 47 525 52 48 50<br>8 11 14 9 11 8<br>60 60 60 60 58<br>38 41 46 43 46 36                         |  |   | 290 3025<br>4 4 6 80<br>330 300 300 305<br>310 295 285 295                                  |             |            |          | 42 405 30 21 20 25 24 23 20   | NOVEMBER 1                               |
| E E        |  | 16 17 18 19 20 21 22   | U U U U U U U U U U U U U U U U U U U  |  |   | 3 4 4 6 6 9 302 302 305 305 305 305 305 305 305 305 305 305                                 |             |            |          | 21 21 20 25 24 23 20  | NOVEMBER. 1                              |
| AMI F      |  | 15 (6 17 19 19 20 21 22  | 54 56 465 47 522 52 48 50 61 61 61 61 61 61 61 61 61 61 61 61 61                                       |  |   | 310   |             |            |          | 20 21 21 20 25 24 23 20   | NOVEMBER* 1                              |
| AMIT       |  | 14 15 16 17 18 19 20 21 22   | 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |  |   | 20 310 0 0 0 302 302 302 303 303 303 303 303  |             |            |          | 19 20 21 21 20 25 24 23 20  | NOVEMBER, 1                              |
| TM T       |  | 13 14 15 16 17 18 19 20 21 22  | 125 52 54 58 465 1 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |  |   | 20 310 0 0 0 302 302 302 303 303 303 303 303  |             |            |          | 19 19 20 21 21 20 25 24 23 20   | NOVEMBER, 1                              |
| E N I I    |  | 12 13 14 15 16 17 18 19 20 21 22                                     | 0 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1  |  |   | 20 310 0 0 0 302 302 302 303 303 303 303 303  |             |            |          | 20 19 19 20 21 21 20 25 24 23 20  | NOVEMBER, 1                              |
| en en      |  | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  |   | 10 10 10 10 10 10 10 10 10 10 10 10 10 1  |             |            |          | 18 20 19 19 20 21 21 20 25 24 23 20   | NOVEMBER» 1                              |
| TABLE 5    |  | 10 11 12 13 14 15 16 17 18 19 20 21 22                               | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  |   | 20 310 0 0 0 302 302 302 303 303 303 303 303  |             |            |          | 17 18 20 19 19 20 21 21 20 25 24 23 20  | NOVEMBER* 1                              |
| en en      |  | 09 10 11 12 13 14 15 16 17 19 19 20 21 22                            | 2 6 15 09 06 375 54 58 60 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |  |   | 10 10 10 10 10 10 10 10 10 10 10 10 10 1  |             |            |          | 16 17 18 20 19 19 20 21 21 20 25 24 23 20                                     | NOVEMBER* 1                              |
| en en      |  | 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |  |   | 1 1 4 2 3 3 3 4 3 4 2 4 2 4 2 4 2 4 2 4 2 4   |             |            |          | 15 16 17 16 20 19 19 20 21 21 20 25 24 23 20                                  |  |
| TABLE 5    |  | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 35   |  |   | 10 10 10 10 10 10 10 10 10 10 10 10 10 1  |             |            |          | 15 16 17 18 20 19 19 20 21 21 20 25 24 23 20                                  |  |
| TABLE 5    |  | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 2 5 5 6 5 75 6 5 75 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  |  |   | 299 269 269 269 269 269 269 269 269 269   |             |            |          | 10 15 15 16 17 16 20 19 19 20 21 21 20 25 24 23 20                            |  |
| TABLE 5    |  | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 35 345 30 445 57 615 69 66 575 59 748 96 46 50 51 60 50 50 50 50 50 50 50 50 50 50 50 50 50            |  |   | 1 1 4 2 3 3 3 4 3 4 2 4 2 4 2 4 2 4 2 4 2 4   |             |            |          | 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 25 20                         |  |
| TABLE 5    |  | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 19 19 20 21 22             | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |  |   | 1 2 29 1 1 1 2 20 300 310 315 312 312 312 312 312 312 312 312 312 312                       |             |            |          | 12 11 10 15 15 16 17 16 20 19 19 20 21 21 20 25 24 25 20                      |  |
| TABLE 5    |  | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10   |  |   | 10 2 299 285 300 310 315 315 310 310 310 310 310 310 310 310 310 310                        |             |            |          | 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 29 20                   |  |
| TABLE 5    |  | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 19 19 20 21 22             | 94 94 37 335 344 30 444 5 7 615 09 66 575 945 56 495 417 154 92 10 10 10 10 10 10 10 10 10 10 10 10 10 |  |   | 3 1 2 2 3 1 1 2 3 1 1 2 3 1 1 3 5 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3                             |             |            |          | 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 25 20                |  |
| TABLE 5    |  | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 19 19 20 21 22          | 955 34 544 55 35 345 34 5 3 5 5 5 5 5 5 5  |  |   | V V V V V V V V V V V V V V V V V V V   |             |            |          | 19 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 25 20             |  |
| en en      |  | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22       | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |  |   | 200 10 10 10 10 10 10 10 10 10 10 10 10 1   |             |            |          | 21 19 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 25 20          | SWEEP 1.6 MC TO 20.0 MC IN 18 SECGNOS.   |
| TABLE 5    |  | 00 01 02 03 04 05 06 07 09 09 10 11 12 13 14 15 16 17 19 19 20 21 22 | 955 34 544 55 35 345 34 5 3 5 5 5 5 5 5 5  | 00 00 00 00 00 00 00 00 00 00 00 00 00 | 0 L L U                                 | HED (19 29 29 29 20 29 29 20 29 29 20 29 29 20 20 29 20 20 20 20 20 20 20 20 20 20 20 20 20 | OM T        | MED CONT   | MED CNT  | 19 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 29 20             |  |
| TABLE 5    |  | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | U U U U U U U U U U U U U U U U U U U  |  | 0 H S S S S S S S S S S S S S S S S S S | HED (19 29 29 29 20 29 29 20 29 29 20 29 29 20 20 29 20 20 20 20 20 20 20 20 20 20 20 20 20 | LHO<br>O Me | MEQ<br>CMT | D ME O   | MED CONT 21 19 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 29 20 |  |
| TABLE 5    |  | 00 01 02 03 04 05 06 07 09 09 10 11 12 13 14 15 16 17 19 19 20 21 22 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | h'F2 Mg0<br>CMT<br>L00<br>L0           | 00 00 00 00 00 00 00 00 00 00 00 00 00  | 200 10 10 10 10 10 10 10 10 10 10 10 10 1   | fo Fi MACO  | for MCO    | h'fe weg | 21 19 14 18 12 11 10 15 15 16 17 18 20 19 19 20 21 21 20 25 24 25 20          |  |

|       | 30.                            | 0.5  | 26 22 22                                |         | 340<br>240<br>355<br>285                   | 255<br>265<br>265<br>250             |        | -    | _ ~       | 2.8   |
|-------|--------------------------------|------|---|---------|--|--------------------------------------|--------|------|-----------|-------|
|       | 156,                           | 0.4  | 275<br>28<br>34<br>22                   |         | 275<br>275<br>340<br>235                   | 26.75<br>24<br>29.0<br>25.0          |        |      |           | 30    |
|       | 0.8N.                          | 03   | 325<br>28<br>40<br>29                   |         | 240  | 0<br>3075<br>3335<br>280             |        | ~    | -         | 28    |
|       | 11 12                          | 02   | 39 24 28 34 44 34                       |         | 230<br>28<br>245<br>215                    | 335                                  |        | -    | -         | 29    |
|       | HAMA                           | 10   | 24<br>29<br>30<br>30                    |         | 230  | 330                                  |        |      | -         | 50    |
|       | MAU!. HAWAII 120.8N. 156.5w    | 00   | 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |         | 2325                                       | 320                                  |        | -    | -         | 30    |
|       | ~                              |      | CNTO                                    | 0 L 0 0 | SF SO                                      | CNIC                                 | MEO    | MEO  | NEO T     | S E O |
|       |                                | HOUR | fo F.2                                  | h'F2    | -e   | (M3000) F2                           | fo F1  | fo E | h'E       | fo Es |
|       |                                | L    | ¥                                       | £       | E  | ě                                    | 4      | og.  | £         | 1 2   |
|       | *0 *                           | 23   | 22.4                                    |         | 250<br>27<br>285<br>235                    | 3029<br>22<br>315<br>290             |        |      |           | 2.7   |
|       | TIME 75.0W                     | 22 2 | 200                                     |         | 25055 2 280 2 240 2                        | 300 3<br>23<br>315 3                 |        |      |           | 26    |
|       | Ë                              | 21 2 | 525<br>28<br>57<br>45                   |         | 2575 2<br>28<br>280 2<br>240 2             | 2925 3<br>20<br>310 3<br>290 2       |        |      |           | 185   |
|       |                                | 20 2 | 270                                     |         | 240 2<br>26 2<br>278 2<br>230 2            | 300 2<br>18 3<br>315 3<br>295 2      |        |      |           | 2.7   |
|       |                                | 6    | 200                                     |         | 220 22 235 2 235 2 2 2 2 2 2 2 2 2 2 2 2 2 | 3025<br>18<br>320<br>290<br>290<br>2 |        |      |           | 2.7   |
|       |                                | 18   | 0<br>785<br>28<br>85<br>70              |         | 208 2<br>27<br>220 2<br>200 2              | 330<br>11<br>335<br>315              |        |      |           | 21 26 |
|       |                                | 17   | 0<br>27<br>27<br>81                     |         | 217<br>27<br>230<br>230<br>208             | 330                                  |        | 200  | 110       | 21    |
|       |                                | 9    | 100<br>26<br>112<br>90                  |         | 223<br>26<br>230<br>230<br>215             | 3125<br>12<br>325<br>300             |        | 560  | 112       | 30    |
|       |                                | 50   | 1125<br>28<br>120<br>92                 | -       | 225 27 230 218                             | 310<br>14<br>315<br>300              |        | 3129 | 110       | 329   |
|       |                                | 14   | 114<br>26<br>121<br>106                 |         | 220<br>26<br>230<br>230<br>215             | 3125<br>16<br>320<br>300             |        | 330  | 104       | 33    |
|       |                                | 10   | U<br>114<br>27<br>123<br>110            | m       | 2175<br>26<br>229<br>200                   | 310<br>17<br>320<br>300              | -      | 340  | 110       | 24    |
|       |                                | 12   | 1135<br>26<br>120<br>110                |         | 210<br>25<br>2275<br>2275<br>200           | 315<br>17<br>320<br>305              |        | 350  | 105       | 23    |
| -     |                                | =    | U<br>111<br>25<br>122<br>106            |         | 220  | 320<br>14<br>330<br>315              |        | 345  | 101       | 2.0   |
| TABLE |                                | ō    | 115<br>25<br>120<br>108                 |         | 215<br>25<br>220<br>220<br>210             | 3275<br>18<br>335<br>310             |        | 325  | 105       | 23    |
|       |                                | 8    | U<br>104<br>25<br>114<br>93             |         | 2225<br>26<br>230<br>230<br>215            | 3225<br>3225<br>330<br>320           |        | 300  | 110<br>17 | 24    |
|       |                                | 90   | 0<br>28<br>28<br>84<br>84               |         | 221<br>27<br>230<br>230<br>215             | 335<br>12<br>340<br>330              |        | 265  | 110       | 56    |
|       |                                | -07  | 715<br>30<br>75<br>68                   |         | 230 240 220 220                            | 330<br>25<br>335<br>315              |        | 210  | 150<br>21 | 5.0   |
|       | _                              | 90   | 425<br>28<br>46<br>38                   |         | 265<br>29<br>295<br>295<br>247             | 290<br>23<br>300<br>280              |        |      |           | 28    |
|       | GRANO BAHAMA I. 126.6N. 78.2W) | 90   | 34                                      |         | 280<br>26<br>300<br>260                    | 280<br>22<br>290<br>290<br>270       |        |      |           | 5.6   |
|       | ° PN                           | 0.4  | 40<br>446<br>37                         |         | 269<br>26<br>300<br>28<br>28               | 280<br>20<br>290<br>270              |        |      |           | 2.7   |
|       | 126                            | 03   | 42<br>25<br>48<br>38                    |         | 250<br>27<br>280<br>235                    | 290<br>23<br>310<br>275              |        |      |           | 28    |
|       | AMA                            | 05   | 3006                                    |         | 255<br>27<br>265<br>235                    | 300<br>22<br>315<br>285              |        |      |           | 2.7   |
|       | 0 BAH                          | ō    | 45<br>27<br>57<br>40                    |         | 260<br>28<br>280<br>235                    | 310<br>25<br>315<br>300              |        |      |           | 2.7   |
|       | GRAM                           | 00   | 46<br>28<br>54<br>40                    |         | 2475<br>26<br>265<br>265<br>230            | 305<br>24<br>320<br>290              |        |      |           | 27    |
|       |                                |      | CNT                                     | CNT     | CNT  | MEO<br>CNT<br>UO                     | MEG    | MEO  | MEO       | MEO   |
|       |                                | MOUR | foF2                                    | h F2    | E.   | (M3000)F2                            | 10 F.I | to E | 'n'E      | fo Es |

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NOVEMBER: 1960

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

NOVEMBER. 1960

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

| BAG                            | 8       | 0<br>100<br>30<br>112<br>84           |       | 2425<br>30<br>250<br>235            | 315<br>22<br>330<br>295                  |        |            |                |   |
|--------------------------------|---------|---------------------------------------|-------|-------------------------------------|--|--------|------------|----------------|---|
| 010                            |         |                                       |       |                                     |  |        |            |                |   |
| BAGUIQ. P. 1. 116.4N. 120.6E1  | ī       | 88<br>28<br>104<br>70                 |       | 240<br>28<br>225<br>225             | 320 3<br>26 3<br>330 3                   |        |            |                |   |
| -                              | 80      | 73<br>29<br>60                        |       | 235 2<br>30 2<br>250 2              | 325 3<br>29 3<br>340 3                   |        |            |                |   |
| 16+4N                          | 0.3     | 0 0 0 0 4                             |       | 235 2 29 2 29 2 29 2 2 30 2 2       | 310 2<br>28<br>330 3                     |        |            |                | - |
| • 120                          | 04      | 27 2 38 38 9                          |       | 265<br>280<br>240                   |  |        |            |                |   |
| * 6E)                          | 92      | 34 9 38                               |       | 275<br>30<br>310<br>255             | 2925<br>26<br>310<br>310<br>270          |        |            |                |   |
|                                | 98      | 56<br>30<br>60<br>74                  |       | 295<br>30<br>310<br>285             | 290<br>290<br>300<br>280                 |        |            |                |   |
|                                | 20      | 29<br>29<br>98<br>96                  |       | 265<br>29<br>270<br>260             | 305<br>29<br>315<br>290                  |        | 265        | 130            |   |
|                                | 90      | 0<br>116<br>29<br>123<br>114          |       | 255<br>29<br>260<br>250             | 300<br>300<br>25<br>310<br>290           |        | 310        | 129            |   |
|                                | 60      | 0<br>1335<br>30<br>136<br>130         | ~     | 250<br>30<br>255<br>240             | 295<br>295<br>310<br>280                 |        | 340        | 125            |   |
|                                | 0       | 1355<br>30<br>140<br>130              | 305   | 240<br>250<br>250<br>235            | 2725<br>2725<br>16<br>290<br>260         |        | 3475       | 123            |   |
|                                | =       | 0<br>128<br>29<br>137<br>124          |       | 240<br>29<br>250<br>230             | 2523<br>14<br>285<br>285<br>245          |        | 375        | 121 20         | l |
|                                | 12      | 0<br>1255<br>28<br>130<br>119         | 7     | E<br>245<br>27<br>250<br>230        | 250<br>250<br>270<br>240                 |        | 360        | 121<br>16      |   |
|                                | 13      | 126<br>130<br>120                     |       | 250<br>30<br>275<br>235             | 255<br>255<br>265<br>235                 |        | 350        | 123            |   |
|                                | 4       | 0<br>130<br>30<br>137<br>120          |       | 250<br>30<br>275<br>240             | 270<br>270<br>285<br>285<br>250          |        | 7          | E<br>125<br>17 |   |
|                                | 5       | 0<br>130<br>30<br>138<br>120          |       | 255<br>30<br>265<br>250             | 280<br>285<br>285<br>265                 |        | 3279       | 129<br>16      |   |
|                                | 91      | 0<br>130<br>29<br>135<br>120          | 7     | 265<br>29<br>270<br>260             | 0<br>2925<br>10<br>300<br>285            |        | 2725       | 125            |   |
|                                | 17      | 0<br>125<br>29<br>134<br>110          |       | 270<br>29<br>280<br>260             | 5 280<br>290<br>265                      |        |            | -              |   |
|                                | 80      | 0<br>120<br>30<br>130                 |       | 285<br>30<br>300<br>270             | 280<br>290<br>260<br>260                 |        |            |                |   |
|                                | 61      | 0<br>114<br>28<br>120<br>108          |       | 285<br>29<br>320<br>320             | 275<br>275<br>285<br>285                 |        |            |                |   |
|                                | 20      | 0<br>1145<br>3 26<br>120<br>110       |       | 2675<br>28 28<br>290<br>250         | 0 2925<br>5 2925<br>5 310<br>5 275       |        |            |                | L |
|                                | 21      | 0<br>6 25<br>6 25<br>0 121<br>0 100   |       | 75 260<br>8 30<br>0 270<br>0 250    | 25 315<br>8 12<br>0 320<br>5 300         |        |            |                |   |
| <u>∓</u>                       | 22      |                                       |       |                                     |  |        |            |                |   |
| TIME 120.0E                    | 2 23    | 0<br>29<br>39<br>3122<br>1122<br>1129 |       | 2475 24<br>30 3<br>250 25<br>240 23 | 310 31<br>18 2<br>320 33<br>290 30       |        |            |                |   |
| *0E                            | <u></u> | 035<br>30<br>93                       |       | 240<br>30<br>250<br>235             | 310<br>324<br>330                        |        |            |                |   |
|                                | Ш       | Q.                                    | °z    | <u>~</u>                            | S  | to.    | ę.         | æ              |   |
|                                | HOUR    | to F2                                 | h. F2 | L                                   | (M 3000)F2                               | (0 F.) | F E        | ш              |   |
|                                | J.R     | 2572                                  | 20.0  | 2077                                | - 1                                      | Σů     | ΣÕ         | ₹0             |   |
| 7                              | 0       | MEO                                   | CNTO  | CNT 31                              | CNT<br>CNT<br>LD                         | MED    | MED        | O E            |   |
| LA PAZ. BOLIVIA 116.55. 68.1W) | 00      |                                       |       | 315 26<br>12 1<br>350 31            |  |        |            |                |   |
| . BOL.                         | 10      | 5                                     |       | 285 26<br>13 1<br>310 31            |  |        |            |                |   |
| 1 × I                          | 8       | 855 0                                 |       | 2625 2<br>18<br>310 2<br>245 2      | n n                                      |        |            |                |   |
| 116.5                          | 03      | 775 0                                 |       | 250 2<br>19 2<br>275 2<br>235 2     | 32.6                                     |        |            |                | - |
| S. 68                          | 8       | 67<br>77<br>65                        |       | 235 2<br>19<br>250 2<br>220 2       | 0<br>315 3<br>330 3<br>310 3             |        |            |                |   |
| -1×                            | 05      | \$ 6 9 8<br>\$ 6 9 8                  |       | 230 2 20 2 245 2 220 2              | 330 3<br>12 330 3                        |        |            |                |   |
|                                | 96      | 177                                   |       | 255 2<br>24 2<br>265 2<br>275 2     | 310 3<br>16 3<br>315 3                   |        | 175 2      | 153 1<br>14    |   |
|                                | 07 0    | 935 1<br>22<br>98 1<br>90 1           |       | 240 2<br>240 2<br>245 2<br>240 2    | 310 2<br>21 21<br>320 3                  |        | 260 3      | 119 1          | - |
|                                | 0.8     | 0<br>110<br>24<br>116<br>108          |       | 230 2<br>24 2<br>235 2<br>225 2     | 290 2<br>19 3<br>315 2<br>280 2          |        | 320 3      | 1111 1         |   |
|                                | 8       | 118 1<br>24 1<br>126 1<br>113 1       | -0.14 | 220 2<br>24 22<br>220 2<br>215 2    | 270 2<br>22<br>295 2<br>295 2<br>265 2   |        | 350 3      | 1111           |   |
|                                | 0       | 0<br>120<br>25<br>130<br>1130         | 315   | 215 2<br>25 25<br>220 2<br>210 2    | 2575 2<br>18<br>280 2<br>240 2           |        | 375 3      | 111            |   |
|                                | =       | 115 1<br>25<br>125 1<br>103 1         | ~     | 210 2<br>25 25<br>215 2             | 2525<br>2525<br>260<br>260<br>240<br>240 |        | 390        | m              | - |
|                                | -2      | 114 1<br>25<br>124 1                  |       | 205                                 | 250 250 240 240                          |        | 007        | 111            |   |
|                                | ē       | 0<br>116<br>25<br>124<br>108          |       | 200<br>25<br>215<br>200             | 245<br>16<br>260<br>230                  |        | 700<br>111 | 111            |   |
|                                | 4       | 0<br>118<br>25<br>130<br>110          |       | 210<br>23<br>220<br>200             | 2525<br>12<br>260<br>245                 |        | 380        | 111            |   |
|                                | 2       | 0<br>1265<br>130<br>110               | -     | 215<br>24<br>220<br>205             | 250<br>19<br>260<br>235                  |        | 365        | 111            |   |
|                                | 9       | 130<br>136<br>136<br>110              |       | 220<br>25<br>235<br>210             | 250<br>250<br>260<br>240                 |        | 340        | 111            |   |
|                                | -2      | 124<br>25<br>135<br>106               |       | 240<br>250<br>250<br>230            | 245<br>18<br>255<br>240                  |        | 300        | 111            |   |
|                                | 9       | 126<br>25<br>132<br>110               |       | 260<br>25<br>270<br>250             | 240<br>16<br>260<br>230                  |        | 230        | 115            |   |
|                                | 6       | 0<br>110<br>26<br>120<br>92           |       | 295<br>26<br>300<br>290             | 250 250 250 235                          |        |            |                |   |
|                                | 20      | 90<br>15<br>110<br>87                 |       | 3875<br>16<br>400<br>325            | 2325<br>2325<br>240<br>220               |        |            |                |   |
| -                              | 12      | 90 473                                |       | 415<br>430<br>370                   | 225<br>225<br>240<br>205                 |        |            |                |   |
| T 1 ME                         | ន       | 989                                   |       | 0 4 10 4 15 3 7 5 3 7 5             | 240                                      |        |            | 1              |   |

(M3000) F2

T1ME 60.0W

TABLE 10

TABLE 9

to F2

h. F2

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U 410 9 435 375

| Conception Cutte Continue Cutte Cu   |       | 9    | 0<br>88<br>35                          | 335<br>360<br>305          | 255<br>11<br>280<br>280<br>250 | 280<br>280<br>290<br>270 | 3           | 3      | 107     | 7     |
|--|-------|------|--|----------------------------|--------------------------------|--------------------------|-------------|--------|---------|-------|
| Concention, only   Concention,   |       | 5    | 74<br>74<br>84<br>85                   | 335<br>12<br>380<br>295    | 260<br>260<br>300<br>230       | 275<br>275<br>285<br>270 | 0 8 0 0 0 0 | 3      | 106     | 17    |
| Concention, only   Concention,   |       | 4    | 76<br>118<br>84<br>68                  | 25<br>15<br>16<br>16<br>15 |                                | 725<br>14<br>14<br>85    |             | 4      | 60.5    | -1    |
| Conception   Content   C   |       | H    |  |                            |                                |                          |             | 67.0   |         | 1.6   |
| CONCEPCION-CHILE   134-645   13-244   |       |      |  |                            |                                |                          |             |        |         |       |
| CONCEPCION. CHILE   1946   1   |       | Н    |  |                            |                                |                          |             | >%     |         |       |
| Characterion-country   |       | =    |  |                            |                                |                          |             |        |         | J     |
| Characterion-critic lands: 13.0ct   Characterion-critic lands: 1   |       | 2    |  |                            |                                |                          | 3           | ~      | 100     | 1     |
| Characterion-critic lands: 13-Qri   Characterion-critic lands: 1   |       | 60   | 61<br>19<br>66<br>56                   | 370<br>11<br>410<br>300    | 242<br>16<br>255<br>230        | 290<br>17<br>305<br>280  | 420         | ~      |         | 18    |
| Concepted by - Child   |       | 8    | 58<br>17<br>54<br>54                   | 370                        | 250<br>13<br>260<br>240        | 290<br>15<br>315<br>270  | 2           | ~      |         | 15    |
| Concepton, Child   Concepton,  |       | 20   | 5.0                                    | 510                        | E 2629<br>2629<br>265<br>250   | 295<br>12<br>300<br>285  | 2           | -      | m       | 12    |
| Concepton, Child   Concepton,  |       | 90   | 0<br>53<br>16<br>62<br>62              | 290                        | 2475<br>2475<br>280<br>235     | 295                      |             |        | ~       | 13    |
| CONCEPT CIDNET   CONC   | ã     | 0.5  | 10 46                                  |                            |                                | 300                      |             | ~      | 2       | =     |
| HOURS    CONCEPT CIPAL CRITER 134-65-174, ADM-1   CONCEPT CIPAL CRITER 134-65-   | 120.  |      |  |                            |                                |                          |             |        | ~       | 10    |
| HOURS    CONCEPT CIPM - CRITER   1946   645   7   1946   11   12   13   14   15   15   15   15   15   15   15  | .05.  | H    |  |                            |                                |                          |             |        | -       | 0     |
| HOURS    CONCEPT CIPM - CRITER   1946   645   7   1946   11   12   13   14   15   15   15   15   15   15   15  | 180   |      | _                                      |                            |                                |                          |             |        |         |       |
| HOURS    CONCEPT CIPM - CRITER   1946   645   7   1946   11   12   13   14   15   15   15   15   15   15   15  | ATION | Н    | _                                      |                            | ~                              |                          |             |        |         |       |
| HOURS  OD 0 0 02 0 0 02 0 0 02 0 0 02 0 0 0 02 0   | 10 ST |      |  |                            | 0.0.00                         |                          |             |        | ~       |       |
| CONCEPT CIPLE   136 + 65 + 73 + 73 + 74     CONCEPT CIPLE   10   | BYR   | 00   |  |                            |                                |                          |             |        |         |       |
| CONCEPTION - CRITE 136-65. 73-DF1  |       |      | MEO<br>CNT<br>UD                       | MEO<br>CNT<br>UO           | CNT                            |                          | CNT         | CNT    | MED     | MED   |
| CONCEPTION - CRITE 136-65. 73-DF1  |       | HDUR |  |                            |                                | 00) F2                   |             |        |         |       |
| CONCEPTION - CRITE 136.65. 73.0Pt   CONCEPTION - CRITE 136 10   CONCEPTION - CRITE 1   |       |      | fo F 2                                 | h F2                       | LL<br>E                        | (M 30                    | 16 F        | е<br>П | ,E      | fo Es |
| HOURS  OCO 01 02 02 03 04 05 05 05 07 06 07 06 07 10 12 13 14 15 16 16 17 18 113 12 12 12 12 12 12 12 12 12 12 12 12 12  |       |      |  |                            |                                |                          |             |        |         |       |
| CONCEPTION - CRITE 136.65. 73.0Pt   CONCEPTION - CRITE 136 10   CONCEPTION - CRITE 1   | B 0 * | 100  | 00 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 |                            | 0000                           | 25.00                    |             |        |         | 3030  |
| CONCEPTION - CRITE 136.65. 73.0Pt   CONCEPTION - CRITE 136 10   CONCEPTION - CRITE 1   | 4E 75 |      |  |                            |                                |                          |             |        |         | 9.0   |
| CONCEPTION - CRITE 136.65. 73.0P.   CONCEPTION - CRITE 136   CONCEPTI   | Ē     |      |  |                            |                                |                          |             |        |         |       |
| HOURS  OD 01 02 03 05 04 05 06 07 07 08 07 11 120 13 14 15 16 15 16 17 18 17 19 19 19 19 19 19 19 19 19 19 19 19 19  |       | 12   |  |                            |                                |                          |             |        |         |       |
| HUMS  OD 0 D2 D3 D3 D4 D5 D6 O7 D6 O7 D1   |       | 20   |  |                            |                                |                          |             | ļ      |         |       |
| CONCEPCION. CHILE 130.65. 73.00.1  HUMBY  OD 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |       | 6    |  |                            |                                |                          |             |        |         |       |
| CONCEPCTON. CHILE 130.05.7 13.0MT   100   101  |       | 9    | 113<br>30<br>120<br>101                |                            |                                | 295<br>300<br>300<br>285 |             |        | 129     | 4130  |
| CONCEPTION - CRITE 136.65. 73.0P.1   CONCEPTION - CRITE 136.65.0P.1   CONCEPTION - CR   |       | -1   | 118<br>29<br>126<br>102                | 310                        | 252<br>282<br>265<br>240       | 295<br>29<br>300<br>285  |             | 270    | 113     | 5 6 7 |
| HOURS  OD 01 D2 03 D4 D5 D6 O7 OF O7 O7 OF O7  |       | 91   | 121<br>27<br>130<br>114                | 290<br>12<br>310<br>280    | 240<br>25<br>255<br>230        | 295<br>27<br>305<br>290  | ~           | 320    | 23      |       |
| CONCEPCION. CHILE   30.654. 73.041    CONCEPCION. CHILE   30.654. 30.641    CONCEPCION. CHILE   30.644. 30.641    CONCEPCION. CHILE   30.644. 30.641    CONCEPCION. CHILE   30.644. 30   |       | 2    | 128<br>28<br>136<br>117                | 315<br>18<br>330<br>290    | E 240 250 220 220              | 295<br>27<br>300<br>285  | -           | 350    | 109     | 419   |
| CONCEPCION. CHILE   30.654. 73.041    CONCEPCION. CHILE   30.654. 30.641    CONCEPCION. CHILE   30.644. 30.641    CONCEPCION. CHILE   30.644. 30.641    CONCEPCION. CHILE   30.644. 30   |       | 4    | 131<br>29<br>136<br>117                | 320<br>20<br>340<br>310    | 235                            | 290<br>295<br>295<br>280 | ,           | 3725   | 111 28  | 7 60  |
| CONCEPCION. CHILE 130.65. 71.00*1  HUMP  OD 10 02 01 02 03 04 05 04 05 06 07 07 100.5 117 1.20*1.30  UD 106 108 100 00 00 07 07 09 09 09 09 102 100.11 1.20*1.31  UD 106 108 100 00 00 07 00 09 09 09 09 09 09 102 10.00*1.31 1.20*1.31  UD 10 00 00 00 00 00 00 00 00 00 00 00 00   |       | 33   | 131<br>29<br>135<br>125                | 119                        |                                | 85<br>29<br>95<br>70     | m           | 17     | 111     | 29 6  |
| CONCEPCION. CHILE 130.653, 73.0Pt   100  |       |      |  |                            |                                |                          | ~           |        |         | 70    |
| MATE   CONCEPTION - CHILE   136.65 x   73.0Px   1   1   1   1   1   1   1   1   1  |       | H    |  |                            |                                |                          | ~           |        |         |       |
| HOURT OD 0 07 07 05 05 06 07 00 09 09 09 09 09 09 09 09 09 09 09 09  |       |      |  |                            |                                |                          | _           |        |         |       |
| CONCEPCION. CHILE 136.65. 73.40#1  HOUR  OD 10 20 01 02 00 06 07 06 09 06 07 08 06 07 09 06 07 00 00 00 00 00 00 00 00 00 00 00 00   |       |      |  |                            |                                |                          | _           |        |         |       |
| CONCEPCION. CHILE 136.65. 73.40#1  HOUR  OD DI D2 D3 D4 D4 D6 D6 D7 D7 D9 D4 D9 D6 D7 D9   |       |      |  |                            |                                |                          |             |        | -       |       |
| CONCEPCION - CHILE 136.65. 73.4.0#1   CMTD   |       | 98   |  | 38                         |                                |                          |             |        |         |       |
| HOURT OO OI D2 D3 D4 D5 D5 UND   |       | 07   |  |                            |                                |                          | -           |        |         |       |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | 38    | 90   | 292                                    | 2                          |                                |                          | ~           |        |         | 33    |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | • 73  | 0.5  |  | ~                          | 250<br>30<br>260<br>240        |                          | ~           | 2025   | 130     |       |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | 36+65 | 0.4  | 785<br>28<br>86<br>70                  |                            | 280<br>30<br>315<br>245        |                          |             |        |         | 185   |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | 9     | 0.3  | 87<br>26<br>90<br>80                   |                            | 260<br>29<br>270<br>230        | 2773<br>26<br>290<br>260 |             |        |         | 30    |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | CH1   | 02   | 96<br>100<br>86                        |                            | 270<br>30<br>280<br>260        | 280 29 300 270           |             |        |         | 245   |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | CIDN  |      |  |                            |                                |                          |             |        |         | 26    |
| HOUR<br>MED 00152<br>MED 00162<br>MED 0 | ONCER |      |  |                            |                                |                          |             |        |         |       |
| H0UR   | Ü     | ٥    |  | 91 99                      |                                |                          | 0 F         | G =    | 0.5     |       |
| 10 F 2 P F 2   |       | 6    | \$ 0 °                                 | 250                        | ₹6.7 d                         |                          | Σő          | Σő     | M. O.   | M C   |
| 7 - H - H - H - H - H - H - H - H - H -  |       | HDUF | 2                                      | 2                          |                                | 000) F                   | _           |        |         |       |
|  |       |      | fo F                                   | r<br>E                     | īc.                            | N)                       | to F        | ∃ 0    | .е<br>П | fo E  |

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TABLE 12

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NOVEMBER, 1960

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CNT

€ E s

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

TABLE 11

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

NDVEMBER. 1960

NOVEMBER. 1960 CM

17 16

1.0 

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONOS.

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

NOVEMBER: 1960

B

| . [  | _       |  |     |                                      |  |          |         | _                                       |  | 9 ≥ [   | . 0.0  |                   | 0.000  |   |  |         |            |   |
|--|---------|--|-----|--------------------------------------|--|----------|---------|---|--|---|--|-------------------|--|---|--|---------|------------|---|
| 28.0   |         | 339  |     |                                      | 305  |          |         |   | 72 (   | 7 21  | 62 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |                   | 300<br>300<br>340<br>245                     |   |  |         |            | 36  |
| 8  |         | 50<br>13<br>40<br>40   |     |                                      | 305  |          |         |   | 29   | 8 F   | 22<br>35<br>35<br>36<br>36<br>36   |                   | 390  |   |  |         |            | 36  |
| -  | 1       | 56<br>63<br>63<br>46   |     |                                      | 5 290<br>300<br>290  |          |         |   | 28   |   | 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4  |                   | 280<br>280<br>310                            | 315   |  |         |            | 38  |
| 20   | 12      | 21<br>21<br>58<br>40   |     |                                      | 2875<br>290<br>290<br>280  |          |         |   | 9 %  | _   | 252 447  |                   | 5 280<br>10<br>330<br>230                    | 300   |  |         |            | 19  |
| 2  |         | 51<br>18<br>57<br>45   |     |                                      | 295<br>295<br>300<br>290   |          |         |   | 300  |   | 0  |                   | 3275<br>14<br>350<br>220                     | 310   |  |         |            | 233   |
| ď  |         | 50<br>23<br>46<br>46   |     |                                      | 290<br>13<br>295<br>285  |          |         |   | 38   |   | 114<br>555<br>144<br>666   |                   | 250<br>16<br>310<br>220                      | 310   |  |         |            | 35  |
| -  | 5       | 55<br>26<br>61<br>50   |     |                                      | 305<br>18<br>310<br>300  |          |         |   | 37   |   | 0<br>52<br>19<br>85<br>45  |                   | 240<br>19<br>300<br>220                      | 320   |  | -       |            | 23  |
| 2  | 5       | 54<br>23<br>60<br>48   |     |                                      | 310<br>11<br>315<br>295  |          |         | ~                                       | 3.1  |   | 5 23<br>83<br>83<br>83<br>84   | ~                 | E<br>23<br>290<br>220                        | 320   |  | -       | -          | 25  |
| -  | ,       | 55<br>61<br>47   |     |                                      | 315<br>11<br>330<br>295  | 1        | m       | 7                                       | 2.0  |   | 5<br>23<br>94<br>49  |                   | 240<br>21<br>275<br>220                      | 3125<br>18<br>325   |  |         |            | 20  |
| 2  |         | 24 24  |     |                                      | 305<br>310<br>290  | 6        | m       | 3                                       | 5.6  |   | 59 26 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  | ~                 | 230<br>230<br>260<br>220                     | 320   | -  |         |            | 2.5   |
| 2  |         | 535<br>24<br>72<br>48  |     |                                      | 300<br>300<br>280  | 4        |         |   | 5 6 7  |   | 13<br>25<br>28<br>98<br>61   | 320<br>420<br>285 | 225<br>21<br>250<br>220                      | 320   | 2  |         |            | 53  |
| 2  |         | 52 53  |     |                                      | 290<br>10<br>310<br>270  | 380      | ~       |   | w<br>  |   | 100<br>100<br>62   |                   | E<br>2275<br>22<br>235<br>220                | 310   | W  | ~       | ~          | 2.5   |
| -  |         | 20<br>20<br>88<br>98<br>98   |     |                                      | 3075<br>10<br>310<br>285   | 380      | 3       | 4                                       | 56   | 26  | 125  | 300 440 5         | 230 280 220                                  | 310   | -  |         |            | 26  |
|  |         | 119  |     |                                      | 290 3<br>15<br>315 3<br>270 2  | 360 3    | -       | -                                       | 5 9  | Ш   | 0 6 9 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 350 4             | 220 2<br>15 250 2                            | 320 3   |  |         |            | 1 7   |
| g  |         | 505  |     |                                      | 275 2 2 300 3  | 335 3    |         |   | 2.7  |   | 09<br>04<br>17<br>80<br>54   | ~~                | 230 2<br>15<br>250 2<br>210 2                | 330 3   |  |         |            | 15  |
|  |         | 45<br>45<br>45<br>45<br>45<br>45   |     |                                      |  | ⊃ 6      |         |   | 58   |   | 50 50  |                   | 230 2<br>14 250 2<br>220 2                   | 325 3<br>14<br>335 34   |  |         |            | 14  |
| 80   |         | 30 30 17   |     |                                      | 30000  |          |         |   | 27 2   |   | 07 07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |                   | 250 22<br>12 12 12<br>270 23                 | 3125 32<br>12<br>320 33   |  |         |            | 12  |
| 5  |         |  |     |                                      | 1 270<br>270   |          |         |   |  | ONO.  | 40   |                   |  |   |  |         |            |   |
| 90   |         | 3 32   |     |                                      | 600  |          |         |   | 7 27   |   | -  |                   | 0 270<br>0 12<br>0 305<br>5 255              | 290<br>290<br>3 11<br>0 310   |  |         |            | 10 12   |
| ;   `  | ٥       | 33   |     |                                      | 2900 280   |          |         |   | 5 27   | z v   | 0,000  |                   | 0 280<br>9 10<br>0 290<br>5 265              | 4 320   |  |         |            |   |
|  |         | 345  |     |                                      | 305  |          |         |   | 52   |   | 0  |                   | 300<br>300<br>320<br>5 320                   | 280   |  |         |            | - 12  |
| ONE ENCARD   | 3       | 2 4 1 4 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2  |     |                                      | _  |          |         |   | 27   | 5 31  | 03   |                   | 335  | -   |  |         |            | 1,4   |
| 3 6  |         | 325  |     |                                      | 295  |          |         |   | 5.6  |   | 0 40   |                   | 325  | M   |  |         |            | 10  |
| 000  | -       | 36 18 31 31 31   |     |                                      | 275<br>275<br>290<br>290<br>265  |          |         |   | 26   |   | 98 098   |                   | 330<br>350<br>310                            | -   |  |         |            | 32  |
|  | 12      | 36 1 2 9   |     |                                      | 280<br>280<br>300<br>260   |          |         |   | 5.0  | 2 A B B B B B B B B B B B B B B B B B B   | 35   |                   | 26002  |   |  |         |            | 35  |
|  |         | CNT  | CNT | CNT                                  | CNT  | CNT      | MEO     | CNT                                     | MEO  |   | CNT  | CNT               | CNT<br>CNT<br>LO                             | CNT   | MED                                      | MEO     | MEG        | MEO   |
| 0.00   |         | N.   | 0.1 |                                      | (M 3000)F2   |          |         |   |  |   | HOUR   | F2                |  | (M3000) F2  |  |         |            |   |
|  |         | 10 FZ  | F 2 | LL.                                  | in)  |          |         |   |  | 1   |  |                   |  |   |  |         |            | Lil   |
|  |         | 2  | Ē   | `a                                   | ≥  | g P      | o E     | , E                                     | to Es  |   | fo F2  | Ē                 | -C   | (M)   | 9  | o<br>B  | ,E         | fo Es   |
|  |         |  |     | 2                                    |  | og og    | 90      | <u>г</u>                                |  |   |  |                   | <u>"</u> E                                   |   | 10 F                                     | -¢      | , P.       |   |
|  |         | 33 88 33   |     | Tue                                  | 280<br>11<br>290<br>270  | 9-       | 9       | .с<br>П                                 | 55   | 150.0k  | 23   |                   | ie<br>E                                      | 2778<br>290<br>270  | fo F                                     | 1° E    | ,e         | 35  |
| 2  | 0 0     | 36 43  |     | 'e                                   | 265 280<br>5 11<br>280 290<br>255 270  | \$-<br>G | ê       | <u>.</u> с                              | 48 55<br>25 23   | 109ER* 1900   | 22 23<br>U U U<br>37 38<br>12 9<br>44 41<br>29 30  |                   | E.   | 2925 2775<br>12 8<br>305 290<br>280 270   | f o f                                    | fo E    | , e        | 39 35   |
| 21 23  |         | 32 36 43<br>9 7 11<br>55 47 48<br>29 34 33   |     | ੌε                                   | 280 265 280<br>6 5 11<br>285 280 290<br>260 255 270  | fo F     | 9 0     | `£                                      | 68 48 55<br>23 25 23   | 00T00ER* 1900   | 21 22 23<br>40 U U U<br>40 37 38<br>46 44 41<br>35 29 30   |                   | ш.<br>"E                                     | 305 2925 2775<br>11 12 8<br>305 305 290<br>290 280 270  | f of                                     | 30      | 9.         | 40 39 35<br>31 30 25  |
| 2  |         | 36 32 36 43<br>9 9 7 11<br>51 55 47 48<br>30 29 34 33  |     | Ē                                    | 260 280 265 280<br>260 285 280 290<br>250 285 280 290<br>250 260 255 270   | 40 6     | 10 6    | ш<br>*£                                 | 385 68 48 55<br>24 23 25 23  | 00T00ER* 1900   | 20 21 22 23<br>0 425 40 37 0<br>16 11 12 9<br>52 46 44<br>34 35 29 30  |                   | .E   | 2975 305 2925 2775<br>18 11 12 8<br>310 305 305 290<br>285 290 280 270  | LL.                                      | ę.      | <u>.</u> e | 28 40 39 35<br>31 31 30 25  |
| 21 23  |         | 49 36 32 36 43<br>15 9 9 7 11<br>60 51 55 47 48<br>36 30 29 34 33  |     | `e                                   | 280 280 280 280 280 280 285 280 295 290 285 280 290 295 250 290 295 270  | fo P     | 10 6    | ш<br>*£                                 | 335 385 68 48 55<br>24 24 23 25 23   | OCTOMER* 1990   | 54 425 40 37 38 16 18 18 18 18 18 18 18 18 18 18 18 18 18  |                   | ш.<br>"E                                     | 305 2975 305 2925 2775<br>16 11 12 8<br>315 310 305 305 290<br>300 285 290 280 270  | UL.                                      | 9       | <u>.</u> e | 22 28 40 39 35<br>29 31 31 30 25  |
| 30 31 33   |         | 36 32 36 43<br>9 9 7 11<br>51 55 47 48<br>30 29 34 33  |     | - 12                                 | 2925 200 260 260 265 280<br>18 15 6 5 11<br>300 295 290 285 280 290<br>250 265 250 260 255 270   | ( o f    | 10 6    | ш<br>*£                                 | 385 68 48 55<br>24 23 25 23  | OCTOBER, 1960   | 20 21 22 23<br>0 0 0 0 0<br>0 0 0 0 0<br>10 11 12 9<br>5 2 46 41<br>5 3 5 29 30  |                   | .E.  | 3025 305 2975 305 2925 2775<br>18 16 18 11 12 8<br>310 315 310 305 305 290<br>295 300 285 290 280 270   | of of                                    | 9 0     | - E        | 28 40 39 35<br>31 31 30 25  |
| 00 30 31 33  | 0 0 0 0 | 53 395 49 36 32 36 43<br>119 18 15 9 9 9 7 18<br>80 80 51 55 47 48<br>46 38 30 50 55 34 33   |     | - 2                                  | 280 280 280 280 280 280 285 280 295 290 285 280 290 295 250 290 295 270  | ( to f   | 10 6    | ω<br>''œ                                | 335 385 68 48 55<br>24 24 23 25 23   | OCTOBER, 1960   | 19 20 21 22 23 24 25 46 44 44 44 1   |                   | u.   | 305 3025 305 2075 305 2025 2775 305 305 305 305 305 305 305 305 305 30  | fo Fi                                    | 9 9     | `Z         | 22 28 40 39 35<br>29 31 31 30 25  |
| 00 30 31 33  | 0 0 0 0 | 395 49 36 32 36 43<br>68 60 51 55 47 48<br>36 36 51 55 47 48   |     | · s                                  | 2925 200 260 260 265 280<br>18 15 6 5 11<br>300 295 290 285 280 290<br>250 265 250 260 255 270   | ( to f   | 10 6    | ω<br>*£                                 | 25 335 385 68 48 55<br>23 24 24 23 25 23   | OCTOBER * 1960  | 18 19 20 21 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25   |                   | u.   | 3025 305 2975 305 2925 2775<br>18 16 18 11 12 8<br>310 315 310 305 305 290<br>295 300 285 290 280 270   | (P)                                      | 9 9     | u e        | 22 28 40 39 35<br>29 31 31 30 25  |
| 00 30 31 33  |         | 53 395 49 36 32 36 43<br>119 18 15 9 9 9 7 18<br>80 80 51 55 47 48<br>46 38 30 50 55 34 33   |     | · c                                  | 200 100 290 2825 20 200 200 205 280 205 280 205 205 205 205 205 205 205 205 205 20   | 9.0      | 10 6    | ш<br>*c                                 | 22 23 24 24 23 25 23 25 23   | OCTOBER # 1990  | 17 18 19 20 21 22 23 10 10 10 10 10 10 10 10 10 10 10 10 10  |                   | u.   | 305 3025 305 2075 305 2025 2775 305 305 305 305 305 305 305 305 305 30  | و  | 9 9     | "e         | 22 28 40 39 35<br>27 25 29 31 31 30 25  |
| is 17 18 10 20 21 23   |         | 725 53 395 49 36 32 36 43 7 111 90 90 90 88 60 51 55 47 48 86 86 86 87 55 47 48 88 86 86 87 55 94 33   |     | Se .                                 | 2225 990 300 280 2945 500 240 280 285 280 280 280 280 280 280 280 280 280 280  | 40       | 10 E    | ш<br>'с                                 | 24 22 23 24 24 23 25 23  | OCTOMER* 1950   | 14   15   16   77   18   19   20   21   22   23   23   24   25   25   25   25   25   25   25   |                   | u.   | 300 305 3025 305 2995 305 2925 2725 2725 292 2772 252 292 292 292 292 292 292 292 292 29  | U. 0                                     | (a)     | u,         | 22 28 40 39 35<br>27 27 25 29 31 31 30 25   |
| is is 17 in 10 20 21 22  |         | 67 725 53 395 69 36 32 36 43 2 36 43 5 5 69 69 69 69 69 69 69 69 69 69 69 69 69  |     | Se .                                 | 200 100 290 2825 20 200 200 205 280 205 280 205 205 205 205 205 205 205 205 205 20   | , c      | 10 E    | ш                                       | 23 24 22 23 24 24 23 25 23   | 0CTOBER, 1960   | 5   6   77   8   9   20   21   22   23   24   25   25   25   25   25   25   25   |                   | G.   | 300 300 300 300 305 3025 305 205 205 305 322 2775 315 315 305 305 305 305 305 305 305 305 305 30  | , o                                      | 3 0     | u,         | 26 27 27 25 29 31 31 30 25  |
| 14 15 15 19 10 20 21 22 22   |         | 67 67 725 53 395 49 36 32 36 43<br>24 23 22 19 18 15 97 67 18<br>88 88 99 90 88 88 36 51 55 47 48<br>55 57 48 40 38 36 30 29 34 33   |     | Se .                                 | 2225 990 300 280 2945 500 240 280 285 280 280 280 280 280 280 280 280 280 280  | o o      | 10 E    | ш                                       | 23 23 24 22 23 24 24 23 25 23  | OCTOBER # 1960  |  |                   | G.   | 300 300 300 305 3025 305 2075 305 2025 377<br>25 26 2 30 18 11 12 277<br>300 310 320 316 316 310 305 305 306<br>265 265 295 206 205 300 265 200 200   | U. 9                                     | 3 2     | u, ''e     | 22 28 40 39 35<br>22 28 40 39 35<br>25 29 31 31 30 25   |
| 13 14 15 15 17 18 10 20 21 22                                      |         | 00 67 67 725 53 395 49 36 32 36 43 19 52 8 19  |     | Se .                                 | 290 2817 2825 220 100 200 2925 210 200 265 281<br>10 10 10 10 10 10 10 10 10 10 10 10 10 1   | , d      | 10 E    | ш<br>:2:                                | 18 23 23 24 22 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25   | OCTOBER, 1900   | 13   4   5   66   77   10   9   50   21   22   23  |                   | G.   | 300 300 300 300 305 3025 305 205 205 305 325 2775 315 315 315 315 315 315 315 315 315 31  | , p                                      | g, c,   | u z        | 18 22 28 40 39 39 35<br>18 22 28 40 39 39 35  |
| 12 14 14 15 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10           |         | 57 60 67 75 59 395 49 36 32 36 43 17 11 17 19 19 68 59 69 69 69 69 69 69 69 69 69 69 69 69 69  |     | (a                                   | 255 290 2815 2825 260 500 260 2925 260 280 285 280 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | g 0      | 9 01    | ш<br>:                                  | 16 18 23 23 24 22 23 24 24 23 25 25 25   | OCTOBER, 1900   | 12   13   14   15   16   77   19   19   20   21   22   23   23   24   24   24   24   24  |                   | te.  | 300 2975 300 300 300 305 305 305 305 305 305 30   | , p                                      | B c)    | u z        | 23 18 22 28 27 27 25 29 40 39 35  |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1                           |         | 55 57 60 67 67 725 53 395 69 36 32 36 63 77 725 59 395 69 36 32 36 63 64 77 725 72 72 72 72 72 72 72 72 72 72 72 72 72   |     | Se .                                 | 285 295 290 2815 2825 990 330 290 2825 286 280 285 285 281<br>19 10 10 10 10 10 20 30 30 30 30 30 30 20 295 280 280 280 280 280 280 280 280 280 280  | ū o      | 3 01    | ш<br>'с                                 | 11 16 18 23 23 24 22 23 24 24 25 23 25 23 24 24 25 23 25 23 24 24 24 24 25 23 25 23 24 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25 | OCTOBER, 1900 TABLE 15  | 10   11   12   13   4   5   6   7   7   18   19   20   21   22   23   24   24   24   24   24   24  |                   | G.   | 105 100 2975 300 300 300 305 302 305 302 305 207 305 2975 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 105 207 207 207 207 207 207 207 207 207 207   | , p                                      | 3 4     | u. Z.      | 22 23 18 22 28 27 27 25 29 31 31 30 25  |
| 00 10 00 01 12 12 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15  |         | \$50  \qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq   |     | Te e                                 | 300 285 255 290 2875 2825 280 300 389 2825 880 280 280 285 285 280 310 310 310 310 310 310 310 310 310 31  | 0        | 3 0.    | ш<br>'2                                 | 13 11 16 18 23 23 24 22 23 24 24 24 25 25 25 25  | TABLE 15  | 09 0 0 1 12 13 14 15 16 17 18 19 20 21 22 23 2   |                   | u.   | 305 306 307 307 300 300 300 305 302 302 302 302 307 305 222 277 305 307 305 307 305 307 305 307 305 307 305 307 307 307 307 307 307 307 307 307 307   | 1, 2)                                    | 3 9     | u. Z       | 15 22 23 18 22 28 27 27 25 29 31 31 30 25   |
| 77 A A A A A A A A A A A A A A A A A A                             |         | \$0 50 409 53 57 60 67 67 725 53 395 49 36 32 39 43 55 59 59 59 50 50 50 50 50 50 50 50 50 50 50 50 50   |     |                                      | 2 90 300 285 285 290 2875 2825 280 300 480 2825 880 280 280 285 285 280 280 285 285 280 280 285 285 280 280 285 285 280 280 285 280 285 280 285 285 280 285 28 | 0.0      | 3 0.    | ш<br>'с                                 | 195 11 16 18 23 22 24 22 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25  | OCTOBER, 1950 TABLE 15 TIME 150.0M  | 08 09 10 11 12 13 14 15 16 77 16 19 20 21 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25   |                   | G.   | 310 305 305 300 2875 300 300 300 305 3025 505 2875 305 2825 2775 305 305 305 305 305 305 305 305 305 30   | 1,42                                     | 3 9)    | u. Z.      | 16 15 22 23 18 22 26 27 27 25 29 40 39 35   |
| 777 AB AB 10 11 12 13 14 15 15 17 18 10 20 20 20 20                |         | 4 to 50 50 495 51 57 60 67 67 725 53 395 49 36 32 30 43 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |     |                                      | 2 675 240 300 285 595 500 2875 2825 250 300 250 2825 250 280 2825 280 280 280 280 280 280 280 280 280  | 4.0      | g 6.    | ш<br>'с                                 | 375 395 315 316 16 18 23 23 24 22 23 24 24 23 25 25 25 25  | SECONDS. OCTOBER, 1950 TABLE 15 TABLE 15  | 707 08 09 10 11 12 13 14 15 16 17 16 19 20 21 22 23 24 14 15 16 19 19 20 21 22 23 24 14 15 16 19 19 20 21 22 23 24 14 15 16 19 19 19 19 19 19 19 19 19 19 19 19 19                           |                   | te.  | 3.05 310 305 305 305 3075 300 300 300 305 305 305 305 305 305 30  | 1,21                                     | 3 9)    | u. z.      | 25 06 04 05 52 52 72 75 62 52 81 65 52 55 16 17 17 18 19 25 58 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19   |
| AS AN AB AB AD IN 11 12 13 14 15 16 17 18 10 20 21 22              |         | 44 46 50 50 495 53 57 60 67 67 725 53 395 49 36 32 36 43 49 49 52 54 59 68 52 54 59 68 52 54 59 68 52 54 59 68 52 54 59 68 52 54 59 68 67 72 79 69 68 69 70 69 69 69 69 69 69 69 69 69 69 69 69 69   |     |                                      | 240 267 279 290 300 285 326 289 2895 2825 280 000 280 2895 280 280 280 285 280 285 280 285 280 285 280 285 280 285 280 285 280 280 280 280 280 280 280 280 280 280   | 9.0      | g &     | ш<br>'с                                 | 345 32 375 395<br>10 15 16 16 13 11 16 18 23 23 24 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25                                     | SECONDS. OCTOBER, 1950 TABLE 15 TABLE 15  | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 19 20 21 22 23 23 10 10 10 10 10 10 10 10 10 10 10 10 10   |                   | G.   | 20 305 310 305 305 305 306 2075 300 300 300 305 3025 305 2025 305 2075 305 2075 3075 3075 3075 3075 3075 3075 3075 3 | 1, 12, 12, 12, 12, 12, 12, 12, 12, 12, 1 | 3 9)    | u. z.      | 26 17 11 15 16 15 22 23 18 22 28 27 27 25 29 31 31 30 25  |
| AK AK AY AB AB 10 10 11 12 14 14 15 15 15 10 20 21 22              |         | 355 44 46 50 50 405 53 57 60 67 67 725 53 395 40 30 32 36 43 55 64 50 50 50 50 50 50 50 50 50 50 50 50 50  |     |                                      | 252 240 247 249 300 285 325 250 2875 2825 99 300 290 2825 286 280 285 286 285 286 285 285 285 285 285 285 285 285 285 285  | 9.0      | g &     | ш ''.e                                  | 30 345 32 375 395<br>15 10 15 16 16 13 11 16 18 23 23 24 22 23 24 24 23 25 25 25   | SECONDS. OCTOBER, 1950 TABLE 15 TABLE 15  | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 12 0 21 22 23 25 1  |                   | te.  | 0 10 10 10 10 10 105 105 105 105 105 105  | 1, 12, 12, 12, 12, 12, 12, 12, 12, 12, 1 | 3 9)    | u. z.      | 305 26<br>14 17 11 15 16 15 22 23 18 22 28 77 75 25 29 31 31 30 25  |
| M PK PK PK PV                  |         | 39 365 44 46 50 50 409 53 57 60 67 67 725 53 395 49 36 32 39 43<br>46 51 48 52 54 59 67 72 79 83 88 82 70 19 19 15 54 711<br>31 30 27 43 36 41 42 48 47 72 55 57 48 46 39 30 30 70 29 34 33  |     |                                      | 2.00 2.52 2.00 2.00 3.00 2.00 2.00 2.00 2.00 2.0   | 9.0      | g g     | ш<br>'с                                 | 265 30 385 32 375 395 24 15 10 15 10 10 10 23 23 24 22 23 24 24 23 25 25 25 25 25 25 25 25 25 25 25 25 25                              | 7.0 MC IN 13.5 SECONDS.  TABLE 15  TABLE 15   | 04 05 05 08 09 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 23 08 09 09 17 12 13 14 15 16 17 18 19 20 21 22 23 23 08 09 09 09 17 12 10 19 19 19 19 19 19 19 19 19 19 19 19 19                |                   | te.  | 2 6 6 0 10 10 10 10 10 10 10 10 10 10 10 10 1   | 1,41                                     | 3 4)    | u. z.      | 40 305 26 40 39 35 21 14 17 11 15 16 15 22 23 18 22 28 27 27 25 29 31 31 30 25  |
| 03 CA                          |         | 37 38 365 44 46 50 50 40 455 53 57 60 67 67 725 53 395 49 36 32 30 43 44 46 60 10 6 47 43 52 50 49 60 11 14 19 19 24 23 25 60 60 60 51 59 47 41 11 11 11 11 11 12 25 25 25 25 25 25 25 25 25 25 25 25 25   |     |                                      | 265 20 255 260 267 267 269 300 305 255 259 320 2875 2875 280 300 280 285 280 280 285 280 280 285 280 280 285 280 280 285 280 280 280 280 280 280 280 280 280 280   | 9-0      | g &     | u 'c                                    | 448 385 30 345 32 375 395 20 10 10 10 10 23 23 24 22 23 24 24 23 25 25 25 25 25 25 25 25 25 25 25 25 25                                | TO 25.0 MC IN 13.5 SECONDS.  TABLE 15  TABLE 15   | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 17 18 19 19 20 21 22 23 24 17 18 19 19 20 21 22 23 24 17 18 19 19 20 21 22 23 24 17 18 18 18 18 18 18 18 18 18 18 18 18 18 |                   | te.  | 260 645 240 280 310 310 310 310 310 310 310 310 310 31  | 1.42                                     | 3 4)    | u. z.      | 45 40 305 26 22 28 40 39 35 21 14 17 11 15 16 15 22 23 18 22 28 27 27 25 29 31 31 30 25   |
| 0.3 CA AK AK AY AD AD 10 11 12 13 14 15 16 17 19 10 20 20 20 20 20 |         | 4.3 37 38 3.65 44 46 50 50 6495 53 57 60 67 67 725 53 395 69 36 36 32 36 43 45 69 10 |     |                                      | 265 240 255 250 245 240 300 315 240 300 285 259 280 2805 2805 280 300 280 282 280 285 280 280 280 280 280 280 280 280 280 280  | 9-0      | 3 ¢.    | ш ''.c                                  | 51 485 305 30 345 35 375 395<br>20 30 24 15 16 15 16 16 13 11 16 18 23 23 24 22 23 24 35 25 25 25                                      | MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 15  TABLE 15  TINE 150.04                                     | 22 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |                   | te.  | 260 656 280 280 310 305 310 305 300 2877 300 300 300 305 3025 305 2875 305 282 2777 500 300 305 3025 305 2875 305 282 2777 500 305 3025 305 305 305 305 305 305 305 305 305 30  | 1.42                                     | 3 4)    | a.z.       | 51 45 40 305 26 22 21 14 17 11 15 16 15 22 23 18 22 28 72 72 72 25 29 40 39 35  |
| 10 00 03 104 05 105 105 105 105 105 105 105 105 105                |         | 42 43 37 38 365 44 46 50 50 405 53 57 60 67 67 725 53 395 43 32 36 43 43 44 46 51 60 6 7 6 7 67 67 67 67 67 67 67 67 67 67 6   |     |                                      | 265  | 9-0      | 3 ¢.    | ш<br>'с                                 | 70 51 445 365 50 345 32 375 395 22 31 24 25 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25  | P 1.0 MC TO 25.0 MC IN 13.5 SECONOS.  TABLE 15  TABLE 15  TINE 150.0*                               | 1   2   3   4   4   5   5   5   5   5   5   5   5  |                   | G.   | 2 6.5 20 6.5 2.0 2.0 2.0 305 310 305 305 300 2975 300 300 305 305 305 302 305 302 305 307 305 2075 307 2075 2075 2075 2075 2075 2075 2075 20  | 1,21                                     | 3 ¢)    | a. z.      | 43 51 45 40 305 26 12 14 17 11 15 16 15 22 28 47 27 27 25 29 40 39 35   |
| 01 05 02 04 05 05 05 05 05 05 05 05 05 05 05 05 05                 |         | 43 42 43 43 49 44 46 50 50 405 53 57 60 67 67 725 53 395 40 30 32 30 43 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60   | `c  |                                      | 1 10 26 26 26 26 25 25 25 25 25 27 26 27 26 27 26 27 26 27 26 26 27 26 26 27 26 26 27 26 2 |          |         | Te .                                    | 63 70 51 485 385 30 345 32 375 395 315 10 18 13 11 16 18 23 23 24 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25                      | P 1.0 MC TO 25.0 MC IN 13.5 SECONOS.  TABLE 15  TABLE 15  TINE 150.0*                               | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 16 19 20 21 22 23 25 09 09 19 10 10 10 10 10 10 10 10 10 10 10 10 10   | -c                |  | 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |  |         |            | 465 43 51 45 40 305 26 2 2 2 2 1 2 1 4 17 11 15 16 15 22 2 3 18 22 28 27 27 25 29 31 31 30 25 25 25 21 20 40 39 35 25 20 40 39 35 25 20 40 39 35 25 20 40 39 35 25 20 40 39 35 25 20 40 30 30 35 25 20 40 30 30 35 20 40 30 30 30 30 30 30 30 30 30 30 30 30 30 |
| 10 00 03 104 05 105 105 105 105 105 105 105 105 105                |         | 42 43 37 38 365 44 46 50 50 405 53 57 60 67 67 725 53 395 43 32 36 43 43 44 46 51 60 6 7 6 7 67 67 67 67 67 67 67 67 67 67 6   |     | CANT<br>CONT<br>CONT<br>CONT<br>CONT | 265  | WED CAT  | MEQ CAT | E C C C C C C C C C C C C C C C C C C C | 70 51 445 365 50 345 32 375 395 22 31 24 25 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25  | SHEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 15  FAIRBANKS. ALASEA (04.0W. 147.8W.)  TIME 150.0W | 1   2   3   4   4   5   5   5   5   5   5   5   5  |                   | P. A. C. | 2 6.5 20 6.5 2.0 2.0 2.0 305 310 305 305 300 2975 300 300 305 305 305 302 305 302 305 307 305 2075 307 2075 2075 2075 2075 2075 2075 2075 20  | MED CAT                                  | MED CAT | NED CNT    | 43 51 45 40 305 26 12 14 17 11 15 16 15 22 28 47 27 27 25 29 40 39 35   |

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TABLE 14

TABLE 13

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|---|---|
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| Γ,  | 405<br>22<br>35<br>35  |   |   | 280<br>18<br>295<br>275  |                       |   |  | 24   | 1960  | 23   | 72<br>31<br>91   |  | 230<br>31<br>245<br>225   | 310<br>328<br>325<br>290  |               |   |   | 31   |
|---|--|---|---|--|-----------------------|---|--|--|---|--|--|--|---|---|---------------|---|---|--|
|   | 40<br>40<br>47<br>477  |   |   | 295 2<br>17<br>300 2<br>280 2  |                       |   |  | 23   |   |  | 93<br>11<br>68   |  | 235 2<br>31 2<br>250 2<br>225 2   | 3075 3<br>28<br>320 3   |               |   |   | 31   |
|   | 2028   |   |   | 2975 2<br>16<br>310 3<br>290 2   |                       |   |  | 23   | QCTOBER.  | 21   | 90<br>31<br>107<br>80  |  | 240 2<br>31 250 2<br>230 2  | 310 3<br>25<br>320 3  |               |   |   | 20   |
| 5   | 1  |   |   | 305 2<br>17<br>320 3<br>290 2  |                       |   |  | 22   |   | 50   | 95<br>31<br>123<br>10  |  | 230 24<br>31 24<br>235 25<br>220 22   | 310 31<br>28 2<br>325 32<br>295 26  |               |   |   | 31 25  |
| ,   | -  |   |   | 3075 30<br>16<br>315 3<br>300 2  |                       |   |  | 21   |   | 6  | 31<br>31<br>130<br>91  |  | 230 23<br>235 23<br>220 22  | 320 31<br>29 2<br>330 32  |               |   |   | 333  |
| - [   |  |   |   | ļ.   |                       |   |  | 22 2   |   |  |  |  |   |   |               | -   | ~   |  |
| 9   |  |   |   | 310<br>320<br>300  |                       |   |  |  |   | =  | 2 126<br>131<br>2 136  |  | 230<br>235<br>220<br>220  | 25 320<br>31<br>5 330<br>0 310  |               |   |   | 31   |
| 1   | -  |   |   | 315<br>18<br>320<br>310  |                       |   |  | 20 25  |   | 12   | 132<br>31<br>140<br>122  | so   | 235<br>31<br>240<br>230   | 3125<br>30<br>325<br>310  |               | 5 2525  | 112   | 31   |
| -   | 97 22 1122 84  |   |   | 315<br>19<br>320<br>305  |                       |   |  | 20   |   | 9.   | 138<br>31<br>150<br>130  | 2525   | 230<br>31<br>240<br>225   | 305<br>31<br>315<br>295   |               | 5 3025  | 107   | 33   |
| ,   |  |   |   | 305<br>119<br>315  |                       |   |  | 2.1  |   | 5  | 153<br>31<br>158<br>136  | 270 270 300 250  | 230<br>30<br>240<br>215   | 300<br>310<br>290   |               | 3375  | 107   | 313  |
| 3   | ~ ~  |   |   | 3 300<br>3 10<br>2 8 5   |                       | }   |  | 20   |   | 4  | 153<br>31<br>156<br>147  | 320<br>325<br>280  | 215<br>31<br>230<br>205   | 300   | -             | 365   | 107   | 31   |
|   | 108<br>21<br>117<br>117<br>88  |   |   | 2975<br>18<br>305<br>290   |                       |   |  | 2.1  |   | 2  | 150<br>31<br>158<br>140  | 2825<br>16<br>320<br>270                                     | 210<br>29<br>220<br>200   | 295<br>300<br>285   | 2             | 375   | 107   | 31   |
| 2   | 107<br>21<br>21<br>116<br>88   |   |   | 2925<br>18<br>300<br>290   |                       |   |  | 2.1  |   | 2  | 142<br>31<br>146<br>134  | 280<br>10<br>320<br>270                                      | 205<br>30<br>210<br>200   | 295<br>31<br>300<br>285   | 2             | 375<br>23   | 107   | 39   |
| 1   | 1055<br>20<br>110  |   |   | 305<br>17<br>310<br>285  |                       |   |  | 50   | E 20  | =  | 135<br>31<br>142<br>127  | 275<br>12<br>285<br>255                                      | 210<br>31<br>215<br>205   | 300<br>31<br>310<br>285   | -             | 370   | 107   | 3.6  |
| 9   | 985<br>105<br>85<br>85   |   |   | 310<br>315<br>285  |                       |   |  | 34   | TABLE   | 9  | 127<br>31<br>132<br>121  | 260  | 210<br>31<br>215<br>210   | 305<br>31<br>315<br>285   | ~             | 350   | 31  | 39   |
| 8   | 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6  |   |   | 310<br>320<br>290  |                       |   |  | 31 20  |   | 60   | 115<br>31<br>123<br>109  | 7 250  | 220<br>31<br>225<br>220   | 310   | ~             | 330   | 31  | 36   |
| 9   | 13 73 63   |   |   | 3175<br>14<br>330<br>310   |                       |   |  | 235  |   | 8  | 100<br>31<br>93  | 3 3 3  | 235<br>31<br>240<br>230   | 325   | -             | 290   | 113   | 31   |
| 24  | 00709  |   |   | 315<br>335<br>305  |                       |   |  | 2.1  | MD S.   | 40   | 31.  |  | 250<br>31<br>255<br>245   | 330   | -             | 225   | 121   | 31   |
| 1   | 4.8  |   |   | 300<br>300<br>325<br>265   |                       |   |  | 12   | SECONDS   | 90   | 37<br>40<br>32   |  | 3025<br>30<br>330<br>285  | 265<br>270<br>255   |               | , ,   |   | 30   |
| 30  |  |   |   | 275 290 290 2500 2   |                       |   |  | 21   | N 27  | 0.5  | 24 2 3 3 4 5 4 5 5 4 5 5 6   |  | 310 3<br>30 3<br>290 2  | 270 2 280 2 260 2   |               |   |   | 30   |
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| -   |  |   |   | 275 2<br>11 290 2<br>265 2   |                       |   |  | 20   | T 10 20.0 MC IN   | 03   | 20004  |  | 260<br>30<br>285<br>245<br>245<br>245   | 2875 2<br>28<br>320 3<br>260 2  |               |   |   | 31   |
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| 1   | 4,1<br>19<br>36  |   |   | 270 2<br>15 2<br>285 2<br>270 2  |                       |   |  | 22   | 0.25 M  | 10   | 53 47  |  |   | 3075 30<br>30<br>330 33<br>290 2  |               |   |   | 31   |
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| F   | CNT CONT   | CNTC  | CNT                                     | MED 28<br>CNT 1<br>UQ 29<br>LQ 27  | MEO                   | MEO   | Z EO<br>CNT  | MED  | ν ±   | 00   | CONT   | CNT  | MEO 235<br>CNT 31<br>UQ 260<br>LQ 220   | MED 310<br>CNT 29<br>UQ 330<br>LQ 290   | MEO           | 0.E   | 0 -   | MED 31   |
|   | !  | #533  | ¥5.77                                   |  | M 70                  | ¥ 5   | \$ 5   | 25.0   |   | 0:   | \$80   | CON  | 200   | 57<br>M S 3 1   | CN            | MED   | MEO   | W  |
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| [   | 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |   |   | 2  |                       |   |  | 52   | 0961  | 23   | 58<br>29<br>64<br>51<br>51   |  | 260<br>31<br>285<br>250   | 285<br>295<br>275   |               |   |   | 59   |
|   | 4 6 5 4 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |   |   |  |                       |   |  | 45 52<br>24 24   | ER. 1900  |  | 585 58<br>28 29<br>66 64<br>52 51  |  | 60 260<br>31 31<br>78 285<br>50 250   | 80 285<br>28 29<br>90 295<br>70 275   |               |   | Î   |  |
|   | 30 30 30   |   |   | 265<br>270<br>270<br>265   |                       |   | 1  |  | OCTOBER, 1960   | 22   |  |  | 260<br>31<br>278<br>250   | 280<br>28<br>290<br>270   |               |   |   |  |
|   | 10 U U U U U U U U U U U U U U U U U U U   |   |   | 265 265<br>5 270<br>290 270<br>250 265   |                       |   | -  | 50 45  |   | 21 22  | 605<br>26<br>26<br>26<br>26<br>25<br>25<br>25  |  | 260 260<br>29 31<br>280 278<br>259 250  | 285 280<br>26 28<br>290 290<br>275 270  |               |   |   | 27 29  |
| 00 00   | 22 C2 C   |   |   | 265 265<br>265 265<br>300 290 270<br>265 250 265   |                       | r4  | -  | 36 50 45   |   | 20 21 22   | 64 605 585<br>28 26 28<br>70 69 66<br>56 55 52   |  | 245 260 260<br>30 29 31<br>260 280 278<br>230 259 250   | 285 285 280<br>27 26 28<br>290 290 290<br>275 275 270   |               |   |   | 29 27 29   |
| 00000   | 13 6 65 56 68 64 36 64 36  |   |   | 270 U U U U U U U U U U U U U U U U U U U  |                       | and .   | 1 1  | 325 36 50 45<br>28 27 27 24  |   | 19 20 21 22  | 72 64 605 585 28 28 26 28 78 70 69 66 68 56 55 52  |  | 215 245 260 260<br>30 30 29 31<br>230 260 280 278<br>205 230 259 250  | 300 285 285 280<br>26 27 26 28<br>310 290 290 290<br>290 275 275 270  |               | 1   | 1   | 28 29 27 29  |
|   | 16 13 6 55 56 55 56 36 44 36   |   |   | 26 270 2 265 265 270 20 270 270 250 250 255 265 265 265 265 265 265 265 265 265  |                       |   | 1  | 405 325 36 50 45<br>30 28 27 27 24   |   | 16 19 20 21 22   | D 72 64 605 585 28 28 28 28 30 78 70 69 66 90 68 56 55 52  |  | 2175 215 245 260 260<br>30 30 29 31<br>220 230 260 280 276<br>210 205 230 259 250   | 30 300 285 285 280<br>10 26 27 26 28<br>320 310 290 290 290<br>305 290 275 275 270  |               |   | 2 1   | 23 28 29 27 29   |
|   | 1  |   |   | 300 265 255 256 256 256 256 256 256 256 256  |                       |   | 117 5 1  | 35 405 329 36 50 45<br>30 30 28 27 27 24   |   | 17 18 19 20 21 22  | 10 00 72 64 605 585 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28   |  | 2325 2175 215 245 260 260<br>30 30 30 30 29 31<br>240 220 230 260 280 278<br>220 210 205 230 259 250  | 305 310 300 265 285 260<br>16 10 26 27 26 28<br>310 320 310 290 290 290<br>300 305 290 275 275 270  |               | 13  | 35 120<br>8 22 1  | 26 23<br>28 28 26 29 27 29   |
|   | 10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   10   17   17   |   |   | 305 300 285 270 2.55 285 270 280 290 270 280 280 280 280 280 280 280 280 280 28  | 2                     | 245<br>11 1   | U<br>123 117<br>15 5 1   | 28 35 405 325 36 50 45<br>31 30 30 28 27 27 24   |   | 16 17 18 19 20 21 22   | 1175 110 90 72 64 605 585 28 28 28 28 28 28 1124 115 90 78 70 69 66 114 92 90 68 56 55 52  | MAIO   | 230 2325 2175 215 245 260 260<br>30 30 30 30 30 29 31<br>237 240 220 230 260 280 278<br>225 220 210 205 230 259 250   | 300 305 310 300 285 285 280<br>28 16 10 26 27 26 28<br>310 310 320 310 290 275 270<br>290 300 305 290 275 275 270   |               | 2975 225<br>20 13   | 1135<br>28  | 31 26 23<br>28 28 28 28 29 27 29   |
| **  | 77 54 585 465 46 42 46 48 59 99 92 88 56 65 56 55 56 55 44 49 38 42 38 44 36   |   |   | 305 305 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |                       | 250 245<br>10 11 1  | E U 123 117 17 15 5 1  | 30 31 30 30 28 27 27 24  |   | 15 16 17 19 19 20 21 22  | 1209 1175 110 90 72 64 605 585<br>28 28 28 28 28 28 28 28<br>130 124 115 90 68 56 55 55<br>118 114 92 90 68 56 55 52   | 5 0 275 0 256  | 230 230 2325 2175 215 245 260 260 30 30 30 30 29 31 235 237 240 220 230 260 280 278 225 225 220 210 205 230 259 250   | 300 300 305 310 300 285 285 280 280 280 280 280 280 280 280 280 280   |               | 330 2975 225<br>25 20 13  | 110 1135<br>29 28   | 345 31 26 23<br>28 28 28 28 28 29 27 29  |
| **  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |   |   | 200 305 305 300 265 27 4 265 265 265 265 265 265 265 265 265 265   | 2                     | 270 250 245<br>15 10 11 1                                   | 110 119 123 117<br>22 17 15 5 1                                  | 29 30 31 30 30 28 27 27 24   |   | 14 15 16 17 19 19 20 21 22   | 12.45 12.91 11.5 10 00 72 64 605 585 585 585 13.01 12.01 15 90 18 70 68 56 55 55 11.8 11.8 11.8 11.4 92 90 68 56 55 52   | 275<br>275<br>300<br>260                                     | E 215 230 230 2325 2175 215 245 260 260 280 28 30 30 30 30 30 30 30 20 31 25 25 25 25 25 25 25 25 25 25 25 25 25  | 295 300 300 300 310 300 265 265 260 25 25 260 310 310 320 310 305 310 305 310 320 310 305 250 250 250 250 250 250 250 250 250 2   | 2             | 350 330 2975 225<br>23 25 20 13   | 108 110 1135<br>26 29 28  | 37 345 31 26 23<br>27 28 28 28 28 29 27  |
| ** ** ** **   | 24 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9   |   |   | 300 300 305 305 305 308 205 20 4 25 285 285 285 315 310 285 20 4 2 5 7 4 25 7 4 25 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5   | 3 2                   | 280 270 250 245<br>15 15 10 11 1                            | 113 110 119 123 117<br>19 22 17 15 5 1                           | 30 29 30 31 30 30 28 27 27 24  |   | 13 14 15 16 17 18 19 20 21 22  | 120   1245   120   117   110   90   72   64   605   565   127   26   26   26   26   26   26   26   | 290 275<br>7 6<br>310 300<br>289 260                         | 220 275 230 230 2325 2175 215 245 260 260 280 3 20 23 28 28 30 3 3 0 3 0 3 0 2 0 2 2 2 2 2 2 2 2 2  | 290 295 300 300 305 310 300 285 285 289<br>307 25 25 27 26 28 28 28 28 28 28 28 28 28 28 28 28 28   | 2 2           | 365 350 330 2975 225<br>20 23 25 20 13  | 110 108 110 1135<br>26 26 29 28   | 27 27 28 28 28 28 29 27 29   |
|   | 15 14 15 16 16 17 18 17 18 17 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18   |   |   | 295 300 300 305 305 405 405 405 405 405 205 205 205 205 205 205 205 205 205 2  | 4 3 2                 | 290 280 270 50 245<br>14 15 15 10 11 1                      | 113 113 110 119 123 117<br>19 19 22 17 15 5 1                    | 29 30 29 30 31 30 30 28 27 27 24   | OCTORER,  | 12 13 14 15 16 17 19 19 20 21 22                                     | 120 120 1245 1209 1175 110 00 72 64 605 565 27 27 26 28 28 28 28 28 28 28 28 28 28 28 28 28  | 290 275<br>290 275<br>4 7 6<br>320 310 300<br>254 289 260    | 215 220 2275 230 230 2325 2175 215 245 260 260 30 30 30 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 20 30 30 30 30 30 30 30 30 30 30 30 30 30 | 295 290 295 300 305 305 30 305 285 285 285 285 280 27 25 25 10 30 2 25 285 285 285 280 285 285 285 285 285 285 285 285 285 285  | 1 2 2         | 370 365 350 2975 225<br>19 20 23 25 20 13   | 109 110 108 110 1135<br>27 26 26 29 28  | 28 27 27 28 28 28 28 29 27 29  |
| ** ** ** ** ** ** ** ** ** ** ** ** **  | 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |   |   | 290 299 300 300 305 305 0285 200 285 285 285 285 285 285 285 285 285 285   | 400<br>400<br>5 4 3 2 | 2829 290 280 270 250 245<br>14 14 15 15 10 11 1             | 115 113 113 110 119 123 117<br>17 19 19 22 17 15 5 1             | 30 29 30 29 30 31 30 30 28 28 27 27 24   | 0CT08ER.  | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 120   120   124 \$ 129   1175   110   90   72   64   605   585 | 2673 290 275<br>8 320 310 300<br>260 254 289 260             | 220 215 220 2275 230 230 2325 2175 215 245 260 260 21 20 20 22 22 22 22 220 220 236 235 237 240 220 230 240 240 250 250 250 250 250 250 250 250 250 25  | 300 295 290 295 300 300 305 30 300 265 285 260 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 1 1 2 2       | 360 370 365 350 330 2975 225<br>20 19 20 23 25 20 13                                    | 110 109 110 108 110 1135  | 29 28 27 27 28 28 28 28 28 28 29 27 29   |
| ** ** ** ** ** ** ** ** ** ** ** ** **  | 10 17 17 17 17 17 17 17 17 17 17 17 17 17  |   |   | 295 290 295 300 300 305 305 300 265 270 4 265 265 285 315 310 320 310 310 310 310 310 310 310 310 310 31 | 400 4 3 2             | 285 2829 290 280 270 250 245<br>10 14 14 15 15 10 11 1      | 115 115 113 113 110 119 123 117<br>13 17 19 19 22 17 15 5 1      | 29 30 29 30 31 30 30 28 27 27 24   | OCTORER,  | 12 13 14 15 16 17 19 19 20 21 22                                     | 116 120 120 1245 1209 1175 110 0 72 64 665 565 565 565 565 565 565 565 565   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 215 220 215 220 2277 230 232 2175 215 245 240 260 260 275 275 275 275 275 275 275 275 275 275   | 310 300 289 290 289 300 300 305 310 300 285 285 280 28 28 28 28 28 28 28 28 28 28 28 28 28  | 2 1 1 2 2     | 350 360 370 365 350 330 2975 225<br>18 20 19 20 23 25 20 13                             | 1095 110 109 110 108 110 1135<br>28 30 27 26 28 29 28   | 29 28 27 27 26 28 29 28 29 27 29   |
| \$\frac{1}{2}  \frac{1}{2}   \frac{1}{2}   \frac{1}{2}   \frac{1}{2}   \frac{1}{2}    \frac{1}{2}     \frac{1}{2}   | 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |   |   | 110 7295 20 7295 300 300 305 305 300 265 270   | 400<br>400<br>5 4 3 2 | 2829 290 280 270 250 245<br>14 14 15 15 10 11 1             | 115 113 113 110 119 123 117 17 19 123 117 19 19 22 17 15 5 1     | 30 29 30 29 30 31 30 30 28 28 27 27 24   | 0CT08ER.  | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 120   120   124 \$ 129   1175   110   90   72   64   605   585 | 2673 290 275<br>8 320 310 300<br>260 254 289 260             | 215 215 220 215 220 2275 230 230 2325 2175 215 245 260 260 260 275 275 275 275 275 275 275 275 275 275  | 315 310 300 285 290 285 300 300 305 310 300 285 285 280 285 280 320 300 300 310 31  | 2 1 1 2 2     | 360 370 365 350 330 2975 225<br>20 19 20 23 25 20 13                                    | 110 1095 110 109 110 108 110 1135<br>28 28 30 27 26 26 29 28  | 28 29 28 27 27 28 28 28 28 28 29 27 29   |
| \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$  | 10 10 10 10 10 10 10 10 10 10 10 10 10 1   |   |   | 19 310 285 290 285 300 300 305 315 300 285 285 285 285 285 285 285 285 285 285   | 400 4 3 2             | 285 2829 290 280 270 250 245<br>10 14 14 15 15 10 11 1      | 115 115 113 113 110 119 123 117<br>13 17 19 19 22 17 15 5 1      | 28 30 29 30 29 30 31 30 30 28 27 27 24   |   | 10 11 12 13 14 15 16 17 18 19 20 21 22                               | 116 120 120 1245 1209 1175 110 0 72 64 665 565 565 565 565 565 565 565 565   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 225 215 215 220 215 220 2275 230 230 2352 2175 215 245 260 260 31 280 275 210 200 230 200 200 200 200 200 200 200 20  | 330 315 310 300 295 290 295 300 300 305 30 30 205 285 280 28 28 28 29 27 28 28 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20  | 1 2 1 1 2 2   | 350 360 370 365 350 330 2975 225<br>18 20 19 20 23 25 20 13                             | 110   110   1095   110   109   110   108   110   1135   135 | 28 28 29 28 27 27 27 26 28 28 28 29 27 29  |
| VV  | 107 Ora Cay ID 12 12 12 12 12 12 12 12 12 12 12 12 12  |   |   | 115 10 14 10 10 10 10 10 10 10 10 10 10 10 10 10   | 400 4 3 2             | 2675 285 2829 290 280 270 250 245 6 10 14 14 15 15 10 11 1  | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 27 28 30 29 30 29 30 31 30 30 28 32 24 25 24 24 25 32 24 24 24 24 24 24 24 24 24 24 24 24 24               |   | 09 10 11 12 13 14 15 16 17 18 19 20 21 22                            | 91 985 116 120 120 1245 120 1175 110 90 72 64 665 585  | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 232 225 215 215 220 215 220 2275 230 230 2323 2175 215 245 240 260 260 230 230 230 230 230 230 230 230 230 23   | 315 310 300 285 290 285 300 300 305 310 300 285 285 280 285 280 320 300 300 310 31  | 1 1 2 1 1 2 2 | 320 350 360 370 365 350 330 2975 225<br>12 18 20 19 20 23 25 20 13                      | 110 1095 110 109 110 108 110 1135<br>28 28 30 27 26 26 29 28  | 30 28 28 29 28 27 27 28 28 28 28 28 29 27 29   |
| 00 00 00 00 00 00 00 00 00 00 00 00 00  | 1  |   |   | 19 310 285 290 285 300 300 305 315 300 285 285 285 285 285 285 285 285 285 285   | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 22 27 28 30 29 30 29 30 31 30 30 28 32 27 24   | 5 SECONDS.  GCTORER,  TABLE 19                            | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 91 985 116 120 120 1245 120 1175 110 90 72 64 665 585  | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 225 215 215 220 215 220 2275 230 230 2352 2175 215 245 260 260 31 280 275 210 200 230 200 200 200 200 200 200 200 20  | 280 330 330 315 310 300 295 290 295 300 300 300 300 265 285 280 280 280 295 29 29 28 28 29 28 28 29 28 28 29 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29 | 1 1 2 1 1 2 2 | 300 320 350 360 370 365 350 330 2975 225<br>18 12 18 20 19 20 23 25 20 13               | 110   110   1095   110   109   110   108   110   1135   135 | 29 30 28 28 29 28 27 27 28 28 28 28 28 29 27 29  |
| 00 00 00 00 00 00 00 00 00 00 00 00 00  | 107 Ora Cay ID 12 12 12 12 12 12 12 12 12 12 12 12 12  |   |   | 115 10 14 10 10 10 10 10 10 10 10 10 10 10 10 10   | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 19 22 27 28 30 29 30 29 31 30 30 28 35 405 328 30 50 45  | 5 SECONDS.  GCTORER,  TABLE 19                            | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 81 91 985 116 120 120 1245 120 1175 110 90 72 64 665 585 28 20 28 28 28 28 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28  | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 232 225 215 215 220 215 220 2275 230 230 2323 2175 215 245 240 260 260 230 230 230 230 230 230 230 230 230 23   | 330 315 315 310 300 295 290 295 300 300 300 310 300 265 285 260 22 22 22 22 22 22 22 22 22 22 22 22 22  | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 29 29 30 28 28 29 28 27 27 26 28 28 28 29 27 29  |
|   | 1  |   |   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 35 405 325 30 59 30 29 30 28 35 405 325 30 50 45 21 19 22 27 27 27 24                                      | TABLE 19 TIME 7   | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 44 49 81 91 965 116 120 120 124 123 1175 110 90 72 64 605 565 27 72 72 62 52 82 28 28 28 64 69 69 69 69 69 69 69 69 69 69 69 69 69   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 260 232 225 215 215 220 215 220 2275 230 2325 2175 215 245 260 260 280 240 231 2325 2175 215 245 260 260 280 240 230 230 230 220 220 220 220 230 236 235 237 240 220 230 240 240 240 240 240 240 240 240 240 24   | 280 330 330 315 310 300 295 290 295 300 300 300 300 265 285 280 280 280 295 29 29 28 28 29 28 28 29 28 28 29 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29 | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 26 29 29 30 28 28 29 28 27 27 28 28 28 28 28 28 29 27 29                                     |
| 20 V V V V V V V V V V V V V V V V V V V  | 10 to  |   |   | 2 6 2 6 3 15 3 10 2 95 2 90 2 95 3 00 3 0 0 3 0 5 3 0 2 65 2 7 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 33 35<br>21 21 19 22 27 28 30 29 30 29 30 31 30 30 28 28 27 27 24  | 23.0 MC IN 13.5 SECONDS.  TABLE 19  TABLE 19              | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 44 49 81 91 965 116 120 120 124 123 1175 110 90 72 64 605 565 27 72 72 62 52 82 28 28 28 64 69 69 69 69 69 69 69 69 69 69 69 69 69   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 250 275 280 232 225 215 215 220 215 220 277 230 227 237 230 235 2175 215 245 240 240 240 240 240 240 240 240 240 240  | 260 2775 290 330 310 315 310 300 295 290 305 300 305 310 300 265 286 260 25 25 26 26 30 30 30 30 30 30 30 30 30 30 30 30 30   | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 29 26 29 29 30 28 28 29 27 27 28 28 28 28 28 28 29 29 27 29                                  |
| 00 00 00 00 E. U. | 13 99 44 07 08 07 10 10 07 10 11 12 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15  |   |   | 2 60 260 265 315 310 295 290 285 300 305 305 265 207 265 265 265 265 265 265 265 265 265 265   | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 28 33 35 40 42 27 28 30 29 30 29 30 31 30 30 28 27 27 24 24 24   | TO 25-0 MC IN 13-5 SECONDS.  GCT08ER.  TABLE 19  TABLE 19 | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 19 19 20 21 22          | 3 49 44 44 49 81 91 985 116 120 120 1245 120 1175 110 90 72 644 665 565 77 25 62 62 82 82 82 82 82 82 82 82 82 82 82 82 82   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 24.25 550 275 260 232 225 215 215 220 215 220 2275 230 230 2325 2175 215 245 260 260 230 230 230 230 230 230 230 230 230 23   | 300 280 2775 290 330 330 315 310 300 295 290 295 300 300 305 30 265 285 280 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 29 29 26 29 29 30 28 29 28 27 27 28 28 28 28 28 29 27 29                                     |
| 20 00 00 00 00 00 00 00 00 00 00 00 00 0  | 22 CO 144 CO 145 |   |   | 2 260 260 265 315 315 310 295 290 299 300 3105 3105 310 285 270 285 285 285 285 285 285 285 285 285 285  | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 435 38 33 35 405 326 30 29 30 29 30 31 30 30 28 27 27 27 24 24   | 1.0 MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 19  TABLE 19    | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 7 53 49 44 44 49 61 91 965 116 120 120 1245 1265 1175 110 0 72 64 605 565 56 57 7 7 7 26 68 127 7 7 7 68 68 127 7 7 7 68 127 7 7 7 68 127 7 7 7 7 68 127 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7   | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 260 2422 250 275 260 232 225 215 215 220 215 220 2275 230 2325 2175 215 245 260 260 20 20 20 20 20 20 20 20 20 20 20 20 20  | 2925 300 280 2775 290 330 315 310 315 310 300 295 290 295 300 300 300 30 30 265 28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 29 29 29 28 29 29 30 28 28 29 28 27 27 28 28 28 28 29 29 27 29                               |
| ** ** ** ** ** ** ** ** ** ** ** ** **  | 1   1   1   1   1   1   1   1   1   1  |   |   | 2 260 260 285 315 310 295 280 289 310 315 310 295 280 289 310 315 310 282 282 282 283 283 283 283 283 283 283  | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 315 34 435 38 313 35 52 27 28 30 29 30 29 30 31 30 30 28 27 27 24 27 27 24                                 | 1.0 MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 19  TABLE 19    | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 5 5 5 4 6 4 4 4 4 4 9 61 91 965 116 120 120 124 512 117 110 0 72 64 605 565 565 565 565 565 565 565 565 565  | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 260 260 242 550 275 260 232 225 215 215 220 215 220 227 237 230 235 2175 215 215 265 260 260 240 240 240 240 240 240 240 240 240 24   | 250 2923 300 280 2773 250 330 330 315 310 300 295 300 300 305 30 30 30 30 285 285 280 25 28 28 28 28 28 28 28 28 28 28 28 28 28   | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 30 39 39 29 29 30 38 38 28 29 27 29 28 27 27 28 38 38 28 29 27 29                            |
| 40  | 00 U U Q 0 19 14 100 U U U U U U U U U U U U U U U U U U   | 35.00   | 0 C                                     | 250 250 250 250 250 260 250 105 305 205 255 250 275 270 270 305 305 305 305 265 255 255 255 255 255 255 255 255 25   | 3 4 600               | 1 1 6 10 14 15 15 15 10 11 1                                | 1 2 10 13 17 19 19 22 17 15 15 11                                | 30 335 34 435 38 33 35 52 27 28 30 29 30 29 30 31 30 30 28 27 27 24 28 28 28 28 28 28 28 28 28 28 28 28 28 | TO 25-0 MC IN 13-5 SECONDS.  GCT08ER.  TABLE 19  TABLE 19 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 57 57 55 49 44 44 49 61 91 965 116 120 120 1245 125 1175 110 0 72 64 605 565 10 28 5 9 57 56 50 64 50 5 64 100 100 115 110 120 1245 115 110 0 72 10 64 605 565 10 28 50 50 50 50 50 50 50 50 50 50 50 50 50  | 1 2 215 26.73  | 260 260 260 2424 250 275 260 232 225 215 215 220 215 220 2775 230 230 2325 2175 215 215 245 260 260 211 20 25 25 25 25 25 25 25 25 25 25 25 25 25   | 295 290 2725 300 280 2775 290 310 310 310 310 310 295 290 300 300 310 300 315 280 285 280 27 27 27 25 27 27 27 27 27 27 27 27 27 27 27 27 27  | 1 1 2 1 1 2 2 | 230 340 350 350 360 380 385 350 330 78915 225<br>2 21   18 12 18 20   19 20 23 25 20 13 | 3 29 31 28 28 30 27 26 20 29 20 29 29 28  | 30 30 29 29 29 28 29 30 28 29 29 28 27 27 28 28 28 28 28 29 27 29                            |
|   | 10   10   10   10   10   10   10   10  | CAT<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO<br>CO | O D O D O D O D O D O D O D O D O D O D | WED 250 250 250 250 265 315 315 310 285 300 300 305 300 265 200 265 265 265 265 265 265 265 265 265 265  | 400 4 3 2             | 2675 285 2829 290 260 270 245<br>1 6 10 14 14 15 15 10 11 1 | 116 115 115 113 113 110 119 123 117<br>10 13 17 19 22 17 15 51 1 | 315 34 435 38 313 35 52 27 28 30 29 30 29 30 31 30 30 28 27 27 24 27 27 24                                 | 1.0 MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 19  TABLE 19    | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 | 5 5 5 4 6 4 4 4 4 4 9 61 91 965 116 120 120 124 512 117 110 0 72 64 605 565 565 565 565 565 565 565 565 565  | 275 2673 290 275 267 260 260 260 260 260 260 260 260 260 260 | 260 260 242 550 275 260 232 225 215 215 220 215 220 227 237 230 235 2175 215 215 265 260 260 240 240 240 240 240 240 240 240 240 24   | WED 295 290 2925 300 280 2875 290 330 330 315 310 300 285 285 290 300 305 310 300 285 285 280 20 20 20 20 20 20 20 20 20 20 20 20 20  | 1 1 2 1 1 2 2 | 230 300 320 350 360 370 365 350 330 2975 225<br>21 18 12 18 20 19 20 23 25 20 13        | 19 110 110 1095 110 109 110 108 110 1135<br>29 31 28 28 30 27 26 26 29 28   | 28 27 27 28 28 28 28 29 27 29  |
|   | 00 U U Q 0 19 14 100 U U U U U U U U U U U U U U U U U U   | 72 WED CAT  | 7. F                                    | 250 250 250 250 250 260 250 105 305 205 255 250 275 270 270 305 305 305 305 265 255 255 255 255 255 255 255 255 25   | 3 4 600               | 1 1 6 10 14 15 15 15 10 11 1                                | 1 2 10 13 17 19 19 22 17 15 15 11                                | 30 335 34 435 38 33 35 52 27 28 30 29 30 29 30 31 30 30 28 27 27 24 28 28 28 28 28 28 28 28 28 28 28 28 28 | 1.0 MC TO 25.0 MC IN 13.5 SECONDS.  TABLE 19  TABLE 19    | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 57 57 55 49 44 44 49 61 91 965 116 120 120 1245 125 1175 110 0 72 64 605 565 10 28 5 9 57 56 50 64 50 5 64 100 100 115 110 120 1245 115 110 0 72 10 64 605 565 10 28 50 50 50 50 50 50 50 50 50 50 50 50 50  | 1 2 215 26.73  | 260 260 260 2424 250 275 260 232 225 215 215 220 215 220 2775 230 230 2325 2175 215 215 245 260 260 211 20 25 25 25 25 25 25 25 25 25 25 25 25 25   | 295 290 2725 300 280 2775 290 310 310 310 310 310 295 290 300 300 310 300 315 280 285 280 27 27 27 25 27 27 27 27 27 27 27 27 27 27 27 27 27  | 1 1 2 1 1 2 2 | 230 340 350 350 360 380 385 350 330 78915 225<br>2 21   18 12 18 20   19 20 23 25 20 13 | 3 29 31 28 28 30 27 26 20 29 20 29 29 28  | 30 30 29 29 29 28 29 29 30 28 28 27 27 28 28 28 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29 |

TABLE 18

TABLE 17

| 6              |  |  |   |  |  |                |   |   |   |          | Γ                            | -  |  |  |   |   |                 |   |  |   |   |
|----------------|--|--|---|--|--|----------------|---|---|---|----------|------------------------------|--|--|--|---|---|-----------------|---|--|---|---|
| 120.0W         | 23   | 975<br>12<br>62<br>63  | -   | 310<br>15<br>360<br>285  | 260<br>270<br>270<br>250   |                | .3  | 121   | 19  |          |                              | £2 :   | 0 4 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |  | 250<br>270<br>230   | 290<br>290<br>280<br>280  | -               | 160   | 121  | 21 29   | 1960  |
| E 12           | 22   | 200  | ~   | 315<br>21<br>350<br>270  | U<br>2625<br>14<br>280<br>255  |                | 220   | 122   | 53  | 1        | ¥                            | . 55   | 0<br>47<br>55<br>63  |  | 260<br>19<br>290<br>240   | 300<br>300<br>305<br>280  |                 | 190   | 125  | 30  | SER.  |
| TIME           | 2  | 515<br>18<br>63<br>49  |   | 3025   | 2775<br>2775<br>14<br>285<br>270   |                | ~   | 125   | 21 29   |          |                              | - I  | 0<br>455<br>16<br>58<br>44   |  | 265<br>12<br>285<br>250   | 2875<br>8<br>310<br>270   |                 | 205   | 126  | 23  | SEPTEMBER.                                    |
|                | 20 2   | 265<br>245<br>644<br>50  | m 0 0   | 3175 3<br>26<br>350 3<br>290 2   | 2675 2<br>14<br>285 2<br>285 2<br>260 2  | 2              | 240   |   | 5.6   |          |                              |  | 525  |  | 14<br>14<br>315<br>265<br>265   | 310 3   |                 | 210 2   | 119 1  | 27  | S   |
|                | H  |  | 450   |  | 26 26  |                |   | 0<br>123<br>8 113                                       |   |          | $\vdash$                     | - 1 -  | _  |  |   |   |                 |   |  |   |   |
|                | 6  | 0<br>58<br>16<br>64<br>54  | 400<br>350  | 300<br>17<br>335<br>275  | 2725<br>2725<br>290<br>290<br>265  |                | 255   | 122   | 24  |          | 9                            |  | 1 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6  |  | 295<br>15<br>340<br>270   | 280<br>280<br>300<br>270  |                 | 220<br>12   | 117  | 2.8   |   |
|                | 6  | 2000   | 5925<br>435<br>320  | 290<br>17<br>310<br>270  | 270<br>270<br>300<br>260   | ~              | 295   | 119   | 55  |          | 9                            | e :  | 11<br>12<br>12<br>13<br>14<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15   |  | 285<br>15<br>330<br>265   | 295<br>295<br>305<br>270  |                 | 195   | 117  | 27  |   |
|                | -  | 0<br>62<br>29<br>74<br>52  | 400<br>400<br>350   | 290<br>25<br>330<br>270  | 270<br>270<br>21<br>300<br>260   | ~              | 2775  | 117<br>114  | 30  |          |                              | - :  | 575<br>18<br>79<br>45  |  | 2675<br>20<br>320<br>255  | 290<br>14<br>300<br>270   |                 | 1775  | 121  | 58  |   |
|                | 9  | 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 310<br>390<br>390   | 270<br>16<br>300<br>255  | 280<br>280<br>300<br>275   | m              | 305   | 113   | 5.8   |          | 9                            | 9  | 81<br>19<br>91<br>69   |  | 255<br>22<br>260<br>245   | 295<br>18<br>305<br>280   |                 | 1825  | 115  | 92  |   |
|                | 60   | 922  | 320<br>13<br>290<br>290   | 275<br>275<br>16<br>310<br>250   | 280  | - 4            | 500   | 110   | 5.6   |          | ,                            | £Ω.  | U<br>71<br>78<br>78<br>56  |  | 260 290 240   | 3025<br>18<br>315<br>290  |                 | 220   | 115  | 2.7   |   |
|                | 14   | 705<br>20<br>90<br>96  | 2875 3<br>14<br>410 3<br>270 2  | 250 2<br>18 2<br>285 3<br>245 2  | 2825 2<br>16<br>300 2<br>275 2   | 000            | 2725 2  | 112 1   | 5.5   |          |                              |  | 0 56 17 71 47  |  | 2675 2<br>22<br>290 2<br>295 2  | 295 3<br>280 3<br>280 2   |                 | 240 2   | 15 1   | 92  |   |
|                | +1   |  |   |  |  |                |   |   |   |          |                              |  |  |  |   |   |                 |   |  |   |   |
|                | .3   | 775<br>22<br>85<br>85  | 370<br>390<br>265   | 5 245<br>21<br>300<br>230  | 295<br>22<br>305<br>260  | ⊃4<br>20<br>20 | 270   | 113   | 2.8   |          | 1                            | 5  | 114  |  | 310<br>350<br>265   | 2875<br>12<br>300<br>270  |                 | 5 290   | 108  | 23  |   |
|                | 2  | 74<br>27<br>88<br>54   | 335<br>18<br>410<br>270   | 2575<br>26<br>280<br>280<br>240  | 285<br>26<br>300<br>260  | 350            | 280   | 111   | 30  |          | 1                            |  | 53<br>11<br>12<br>45<br>45   |  | 285<br>17<br>320<br>260   | 280<br>290<br>270   |                 | 2625  | 109  | 2 4   |   |
| 2.2            | =  | 2 4 4 6 9 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  | 350<br>18<br>420<br>260   | 240<br>21<br>290<br>235  | 300<br>23<br>310<br>260  | 395            | 270   | 113   | 2.7   | 5 4      | :                            | =   :  | 122  |  | 300<br>15<br>325<br>285   | 270<br>280<br>280<br>260  |                 | 2575  | 108  | 54  |   |
| ABLE           | 0  | 71<br>26<br>76   | 360   | 250  | 300<br>25<br>310<br>260  | 500            | 270   | 111   | 2.7   | TABLE    | 9                            | 0 .  | 0 2 2 4 5 5 6 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6  |  | 320<br>15<br>340<br>295   | 270<br>270<br>270<br>250  |                 | 240   | 100  | 54  |   |
| -              | 8  | 65<br>25<br>71<br>61   | 320<br>16<br>280  | 250  | 300  | 4              | 250   | 112<br>10   | 52  |          | 1                            |  | 0 49<br>1 18<br>6 6 0  |  | 280   | 260<br>260<br>280<br>255  |                 | 230   | 115  | 52  |   |
|                |  |  |   | 255 2<br>17<br>280 2<br>240 2  |  | 2              | 245 2   |   | 20  |          |                              |  | 0 0<br>16<br>68<br>68  |  | E 305 2 2 350 3 275 2   | 250 2   |                 | 210 2   |  | 5.8   |   |
|                | 90   | 2020   | 295<br>295<br>370<br>275  |  | 300<br>19<br>310<br>285  |                | 200   | 111   |   |          | H                            |  |  |  |   |   |                 |   | 121  |   | * 50  |
|                | 07   | 28<br>18<br>40<br>50<br>50   | N   | 260<br>285<br>245  | 5 295<br>15<br>315<br>290  |                |   | 114   | 16  |          | 1                            | 6  | 0<br>16<br>74<br>50  |  | 2825<br>16<br>300<br>265  | 270 270 255   |                 | 160   | 115  | 2.5   | SECONDS                                       |
|                | 8  | 50 4 9 0 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2   | -   | 265<br>265<br>300<br>255   | 2975<br>14<br>305<br>290   |                | -3  | 115   | 15  |          | 8                            |  | 70<br>15<br>84<br>52   | -  | 280 23 23 255 255   | 265   |                 | 160   | 110  | 28  | 5   |
| - × 0          | 90   | 9 4 7 6 8  |   | 265<br>13<br>290<br>250  | 300  |                | 220   | 115   | 1.3   |          | 1                            | 50   | 0<br>10<br>10<br>47  | ~  | 280<br>26<br>305<br>265   | 260<br>280<br>280<br>255  |                 | 1000  | 135  | 30  | IN 13+5                                       |
| 120,           | 8  | 20 1 20  |   | 280<br>280<br>300<br>260   | 290<br>11<br>290<br>280  |                | ru .  | 3   | 11  |          | 1                            | 60   | 062<br>255<br>75<br>50   | ~  | 275<br>25<br>290<br>260   | 270<br>275<br>275<br>260  | -               | 155   | E<br>132<br>14   | 29  | e e   |
| 180.05. 120.0W | 03   | 0 4 0 6  |   | 30.75  | 280<br>13<br>285<br>270  | -              | 225   | 121   | 7.7   |          | 190,081                      |  | 23 78 7.78   |  | 275 28 290 255  | 280<br>280<br>280   |                 | 155   | 127  | 30  | TO 25.0 MC                                    |
| - 80           |  |  |   | 13<br>13<br>13<br>290<br>2   |  |                | 290 2   | 121 1   | 15  |          |                              |  | 0 2 0 4  | -  | 270 2<br>27<br>27<br>285 2<br>250 2   | 275 4<br>275 4<br>17 2<br>290 2<br>265 2  | -               | 160 1   | 121 1  | 29  |   |
| STATION        | 8  |  |   |  | 25 260<br>11<br>275<br>275<br>255  |                |   |   |   |          | Ĕ                            |  | 625 6<br>20 2<br>69 7<br>55 5  |  |   |   |                 |   |  |   | 1 * 0 MC                                      |
|                | ō  | 177  |   | 5 375<br>410<br>320  | 0<br>2625<br>12<br>270<br>270<br>250   |                | 295   | 116   | 2.1   |          |                              | ō :  | -  |  | 250<br>270<br>240   | 280<br>280<br>300<br>270  |                 | 5 170   | 123  | 5 20  |   |
| BYRD           | 8  | 200  |   | 3275<br>18<br>365<br>320   | 265<br>280<br>280<br>260   |                | 3   |   | 50  |          | POLE                         | 8  | 5 2 8 6 9<br>6 2 8 8 9   |  | 260<br>23<br>295<br>235   | 285<br>295<br>295<br>285  |                 | 1625  | 121  | 175   | SWEEP   |
|                |  | CNTC   | CNT   | CNT  | CNT CO   | MEO            | CNT   | CNT   | CNT   |          |                              |  | CNT  | MED<br>CNT<br>UQ   | CNT<br>CNT<br>LO  | CN7<br>CN7<br>CN7   | MED             | MED   | ME0<br>CNT   | MED   |   |
|                | HOUR   |  |   |  | (M3000)F2  |                |   |   |   |          | 9                            | 900  |  |  |   | M3000)F2  |                 |   |  |   |   |
|                | ı.   | fo F2  | 2   | LL.  | ğ  | -              |   |   |   |          | - 13                         | Ξ  | 10 F 2   | 2  |   | 8   | =               | ш   | ш  | fo Es   |   |
|                |  |  |   |  | 20   |                | Ш   | Lid<br>"  | ы   |          |                              |  | 0  |  |   | ∑   | .0              | 0   |  |   |   |
|                |  | 9  | É   | -E   | (M.3   | \$             | °5<br>Н   | 'E  | fo Es   |          |                              |  | oj.  | Ĩe .   | <u>-</u> C  | (M  | to FI           | \$  | Æ  | o   |   |
|                |  |  |   | Te .   |  | \$             | 9   |   |   |          | _                            |  |  |  |   |   | \$              | ş   | ÎE .   |   | 0   |
| 75 ° 0 W       | 23   | 97<br>26<br>104<br>84  |   |  | 270<br>24<br>270<br>260  | \$             | 10  |   | 19 fo E   |          | 20.02                        |  | 0<br>13<br>50<br>50<br>50  |  | 310<br>310<br>360<br>280  | 265<br>275<br>245   |                 | 2   |  | 23  | 1960  |
| IME 75.0W      | 22 23  |  |   | Te .   |  | \$             | 9   |   |   |          | 7                            |  |  |  | 0 E 3025 310 24 18 355 360 275 280  |   | 40              | 2   | ÎE .   |   |   |
| TIME 75,0W     |  | 0<br>99 97<br>26 26<br>106 104<br>86 86  |   | 310<br>27<br>320<br>290  | 270 270<br>24 24<br>270 270<br>260 260   | 40 F           | o 0   |   | 19  |          |                              | 22   | 0 0<br>56 55<br>16 13<br>69 69   |  | 0 E 3025 310 24 18 355 360 275 280  | 260 265<br>13 275<br>270 275<br>250 245   | 100             | 2   | 2  | 23  |   |
|                | 21 22  | 95 99 97<br>26 26 26<br>110 106 104<br>88 86 84  |   | 320 300 310<br>27 27<br>330 315 320<br>290 290 290   | 260 270 270<br>23 24 24<br>270 270 270<br>250 260 260  | 10 6           | ф<br>П  |   | 19  |          | 11ME                         | 21 22  | 51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |  | 0 0 E 3025 310 24 24 18 355 355 360 280 275 280   | 250 260 265<br>6 13 7<br>255 270 275<br>250 250 245   | 9               | 1 2   | 2  | 30 23   | SEPTEMBER: 1960                               |
|                | 20 21 22   | 0 955 95 97 97 97 86 86 86   |   | 280 320 300 310 h'<br>27 27 27 27<br>290 330 315 320<br>265 290 290 290  | 260 260 270 270<br>20 23 24 24<br>275 270 270 270<br>255 250 260 260   | 101            | , t   |   | 21 27 27 19<br>27 27 27 27  |          | JHE.                         | 20 21 22   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  | E U U U E E 24 18 26 355 350 360 255 355 360 275 280 275 280  | 2075 250 260 265<br>10 25 260 265<br>280 255 270 275<br>245 250 250 245                                   | 9               | 3 1 2   | 3 2  | 315 275 30<br>24 26 25 23   |   |
|                | 19 20 21 22  | 1175 95 95 99 97<br>30 26 26 26 26<br>130 114 10 106 104<br>100 90 88 86 86  |   | 250 280 320 300 310 h <sup>2</sup> 350 27 27 27 250 290 330 315 320 290 290 290 290 290 290 290 290 290 2  | 270  | d oh           | ф.  |   | 275 21 27 27 29<br>30 27 27 27 27   |          | 3611                         | 19 20 21 22  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  | 330 8075 3025 3025 310<br>19 16 26 26 18<br>360 355 355 350<br>280 270 280 275 280  | 2.65 2675 256 266 265 12 260 265 270 270 270 270 270 270 245 250 250 245                                  |                 | 1 2   | 3 1 2 3  | 23 315 275 30<br>27 24 26 25 23   |   |
|                | 20 21 22   | 135 1175 955 95 99 97 30 30 26 26 26 26 26 26 140 130 114 110 106 104 112 100 90 88 86 84  |   | 260 250 280 320 300 310<br>260 260 290 330 315 320<br>250 240 265 290 290 290  | 300 250 260 260 270 270 270 29 28 20 275 270 270 270 270 270 270 270 270 270 270   | d of           | 0   | .e  | 28 275 21 19<br>30 30 27 27 27 27 27  |          | 3611                         | 19 20 21 22  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  | E 10 10 E 0 0.2 E 110 10 10 10 10 10 10 10 10 10 10 10 10   | 275 285 2875 250 260 285<br>280 280 285 270 275<br>270 280 285 270 275<br>270 280 285 250 285             | 0 0 0           | 3 3 1 6   | 4 3 1 1 2 W  | 35 23 315 275 30<br>25 27 24 26 25 23   |   |
|                | 19 20 21 22  | 136 135 1175 955 95 99 97<br>30 30 30 26 26 26 26<br>144 46 10 130 110 100 104   |   | 250 250 250 250 250 350 310 250 250 250 250 250 250 250 250 250 25   | 300 300 290 260 260 270 270 270 20 20 20 20 20 20 20 20 20 20 20 20 20   | 40 6           | 24.0  | 119<br>20 3   | 295 28 275 21 19<br>30 30 30 27 27 27 27 27   |          | 3411                         | 17 18 19 20 21 22  | 595 61 61 63 51 56 55<br>72 68 65 60 64 69 69 69<br>56 58 49 57 49 47 50   | °E   | 2 5 9 10 10 10 10 10 10 10 10 10 10 10 10 10  | 290 275 265 2675 269 269 269 269 269 269 275 260 275 275 275 275 275 275 275 275 275 275                  | (0)             | 550<br>7 3 3 1 2  | 127<br>127<br>4 3 1 1 2  | 22 25 27 24 26 25 23  |   |
|                | 18 19 20 21 22   | 135 1175 955 95 99 97 30 30 26 26 26 26 26 26 140 130 114 110 106 104 112 100 90 88 86 84  |   | 260 250 280 320 300 310<br>260 260 290 330 315 320<br>250 240 265 290 290 290  | 2925 300 300 290 260 260 270 270 270 290 290 290 290 290 290 290 290 290 29  | d of           | 0   | .e  | 28 275 21 19<br>30 30 27 27 27 27 27  |          | 3411                         | 17 18 19 20 21 22  | 95 61 61 03 91 56 55<br>15 16 16 16 16 16 16 16 55<br>6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6  |  | E 10 10 E 0 0.2 E 110 10 10 10 10 10 10 10 10 10 10 10 10   | 275 285 2875 250 260 285<br>280 280 285 270 275<br>270 280 285 270 275<br>270 280 285 250 285             | (0)             | 3 3 1 6   | 4 3 1 1 2 W  | 35 23 315 275 30<br>25 27 24 26 25 23   |   |
|                | 17 18 19 20 21 22  | 136 135 1175 955 95 99 97<br>30 30 30 26 26 26 26<br>144 46 10 130 110 100 104   |   | 235 250 260 280 320 300 310 21 27 27 27 27 27 27 27 27 27 27 27 27 27  | 2925 300 300 290 260 260 270 270 270 290 290 290 290 290 290 290 290 290 29  | d of           | 300 240<br>19 15 4  | 119<br>20 3   | 295 28 275 21 19<br>30 30 30 27 27 27 27 27   |          | I I WE                       | (6 17 18 19 20 21 22   | 595 61 61 63 51 56 55<br>72 68 65 60 64 69 69 69<br>56 58 49 57 49 47 50   | °E   | 2 5 9 10 10 10 10 10 10 10 10 10 10 10 10 10  | 290 275 265 2675 269 269 269 269 269 269 275 260 275 275 275 275 275 275 275 275 275 275                  | (0)             | 550<br>7 3 3 1 2  | 127<br>127<br>4 3 1 1 2  | 22 25 27 24 26 25 23  |   |
|                | 16 17 18 19 20 21 22   | 145 141 136 135 117 95 95 99 97 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98   | 'c  | E 235 250 260 250 280 320 300 310 PT 225 250 250 250 250 250 250 250 250 250   | 292 2925 2925 300 300 290 260 260 270 270 270 270 270 270 270 270 270 27   | 0 01           | 0<br>330 300 240<br>12 19 15 4  | 109 109 119 a b'  | 335 295 28 275 21<br>28 30 30 30 27 27 27 27 27   |          | 381                          | 15 (6 17 (8 19 20 2) 22  | 015 59 595 61 01 03 51 56 55 18 18 18 18 18 18 18 18 18 18 18 18 18  | , e  | 2.65 2.60 2.60 310 310 3175 310 310 310 310 310 310 310 310 310 310 | 295 275 276 275 225 274 250 210 20 21 21 21 21 21 21 21 21 21 21 21 21 21                                 | 10)             | 550<br>7 3 3 1 2  | 121 127 4 3 1 1 2 8 8 1 4 8 1 4 8 8 1 1 1 2 8 8 1 8 1 8 1 8 1 8 1 8 1 8  | 22 22 25 27 24 26 25 23   |   |
|                | 14 15 16 17 18 19 20 21 22   | 1455 145 141 136 135 1175 955 95 96 97 97 97 97 97 97 97 97 97 97 97 97 97   | 2, 200 S S S S S S S S S S S S S S S S S S                                      | F. C. S.   | 2855 2925 2925 300 300 290 260 260 270 270 270 290 300 300 290 300 275 20 23 24 24 24 25 300 300 300 375 200 255 250 260 260 260 260 260 260 260 260 260 26              | 9 01           | 360 330 240<br>19 12 19 15 4  | 110 109 109 119<br>30 27 25 20 3                        | 405 37 335 295 28 275 21 19<br>30 30 28 30 30 27 27 27 27 27  |          | 1796                         | 14 15 (6 17 18 19 20 21 22   | 92 615 59 595 61 61 63 55 56 52 59 59 59 59 59 59 59 59 59 59 59 59 59   | 7.5<br>275<br>275<br>275<br>275<br>275<br>275<br>275<br>275<br>275<br>27 | US 0.5 26 26 26 10 10 10 10 10 10 10 10 10 10 10 10 10  | 00 295 2875 290 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |                 | 4 3 5 250 250<br>4 3 5 7 3 3 1 2  | 117 U U U U U U U U U U U U U U U U U U  | 25 22 22 25 27 24 26 25 23  |   |
|                | 13 14 15 16 17 18 19 20 21 22  | 142 1455 145 141 136 135 1179 95 95 99 97 72 9 30 30 48 90 97 148 155 155 150 148 155 150 100 100 100 100 100 100 100 100  | 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | F U E S 250 250 250 250 250 250 250 350 350 350 350 350 450 250 250 250 250 250 250 250 250 250 2  | 285 2825 5922 2925 300 300 250 660 260 270 270 270 270 29 30 30 30 30 30 30 30 30 30 30 30 30 30   | 10.6           | 1 30 300 1 300 240 1 40 1 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                             | 28 30 27 25 20 3  | 29 30 30 28 30 30 375 27 27 27 27 27 27   |          | HIT.                         | 13 14 15 (6 17 18 19 20 21 22  | 81 82 645 59 595 61 61 63 51 56 55 69 69 69 69 69 69 69 69 69 69 69 69 69  | 1125 275 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.                       | 250 255 265 265 260 300 310 310 302 3025 3025 3025 3025 3025 3025 3025  | 2975 500 205 2975 200 205 200 200 200 200 200 200 200 20  | 1               | 240<br>240<br>247<br>4 3 250 250<br>2 3 3 1 2 2                                   | 121 L17 121 127 4 3 1 1 2 2 h'   | 23 22 25 22 22 25 27 24 26 25 23  |   |
| 3HIT           | 12 13 14 15 16 17 18 19 20 21 22                                     | 1375 Let 2 Let 5 Let 1 Let 1 150 1135 1175 955 95 97 97 97 97 97 97 97 97 97 97 97 97 97   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | F E U S 230 230 230 250 250 250 250 250 320 310 310 250 250 250 250 250 250 250 250 250 25   | 290 289 2805 2928 8925 300 300 270 460 260 270 270 270 280 280 295 300 300 300 290 280 280 295 200 290 290 290 290 290 290 290 290 290                                   | 10 F           | 390 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 109 109 110 109 109 119 25 20 3                         | 28 29 30 30 28 30 30 30 27 27 27 27 27  | 299.4    | 34                           | 12 13 14 15 (6 17 18 19 20 21 22                                     | 99 81 82 615 59 595 61 61 63 51 56 55 52 62 18 15 15 15 15 15 65 55 65 64 69 69 67 60 64 69 67 69 69 69 69 69 69 69 69 69 69 69 69 69  | 290 5125 275<br>315 200 5135 275<br>315 315 320 605<br>225 270 260 320   | 245 250 25 240 260 260 310 340 310 310 310 310 310 310 310 310 310 31   | 300 2475 00 255 245 20 275 245 245 240 240 20 20 315 245 245 245 245 245 245 245 245 245 24               | 100             | 2375 240 4 250 250 3 3 1 2 2 60 60  | E 1 E 1 E 1 E 1 12   | 27 23 22 25 22 22 25 27 24 26 25 23   |   |
| 21 TIME        | 13 14 15 16 17 18 19 20 21 22  | 136   1375   142   1455   145   141   136   135   1175   955 99 99 97     136   1375   142   1455   145   141   136   135   1175   955 99 99 97     144   146   146   155   156   150   144   161   161   161     156   151   152   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155     155   155   155   155     155   155   155     155   155   155   155     155   155     155   155   155     155   155   155     155   155   15 | 8 3 20 20 20 20 20 20 20 20 20 20 20 20 20                                      | 10 E E 20 20 20 20 20 20 20 20 20 20 20 20 20  | 290 290 285 2825 2925 2925 300 300 290 640 260 270 270 270 270 270 270 270 270 270 27  | 10 F           | 375 340 77 340 340 340 240 4  | 25 28 28 30 27 25 20 3                                  | 27 28 29 30 30 28 30 30 30 27 27 27 27 27   | 23       | 34                           | 13 14 15 (6 17 18 19 20 21 22  | 27 25 22 20 18 15 15 15 15 15 15 25 20 20 18 15 15 15 15 15 15 15 15 15 15 15 15 15  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 245 246 250 255 245 246 240 270 340 15 10 10 15 10 10 15 10 10 15 10 10 15 10 10 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10   | 300 900 2875 900 285 285 280 215 285 285 285 285 285 285 285 285 285 28                                   | 100             | 239 2375 240 4 3 250 257 3 3 1 2 6 6  | 1  | 28 27 23 22 25 22 22 25 27 24 26 25 23  |   |
| 3HIT           | 12 13 14 15 16 17 18 19 20 21 22                                     | 1865   136   1375   142   1455   144   136   135   1375   145   145   146    | 27  | F E U S 230 230 230 250 250 250 250 250 320 320 310 47.  | 290 290 285 2825 2925 2925 300 300 290 640 260 270 270 270 270 270 270 270 270 270 27  | 10 F           | 390 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 109 109 110 109 109 119 25 20 3                         | 28 29 30 30 28 30 30 30 27 27 27 27 27  | 299.4    |                              | 12 13 14 15 (6 17 18 19 20 21 22                                     | 785 83 89 81 82 645 59 856 61 61 63 51 56 55 56 56 56 56 56 56 56 56 56 56 56  | 290 5125 275<br>315 200 5135 275<br>315 315 320 605<br>225 270 260 320   | 245 245 245 245 25 0 25 0 245 245 245 245 245 245 245 245 245 245   | 305 500 300 2975 300 2975 500 275 245 245 245 240 240 240 240 245 245 245 245 245 245 245 245 245 245     | 1               | 225 230 2373 240 250 250 250 3 3 1 2 2 66   | E2 E E E E E E E E E E E E E E E E E E   | 27 23 22 25 22 22 25 27 24 26 25 23   |   |
| 21 TIME        | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 136   1375   142   1455   145   141   136   135   1175   955 99 99 97     136   1375   142   1455   145   141   136   135   1175   955 99 99 97     144   146   146   155   156   150   144   161   161   161     156   151   152   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155   155     155   155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155   155     155   155   155     155   155   155   155     155   155   155     155   155   155   155     155   155     155   155   155     155   155   155     155   155   15 | 27  | 10 U U E E U E E U E E D E E D E E D E D E   | 290 290 285 2825 2925 2925 300 300 290 640 260 270 270 270 270 270 270 270 270 270 27  | for            | 375 340 77 340 340 340 240 4  | 25 28 28 30 27 25 20 3                                  | 27 28 29 30 30 28 30 30 30 27 27 27 27 27   | 23       |                              | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 27 25 22 20 18 15 15 15 15 15 15 25 20 20 18 15 15 15 15 15 15 15 15 15 15 15 15 15  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 245 246 250 255 245 246 240 270 340 15 10 10 15 10 10 15 10 10 15 10 10 15 10 10 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10   | 300 900 2875 900 285 285 280 215 285 285 285 285 285 285 285 285 285 28                                   | 1 1             | 239 2375 240 4 3 250 257 3 3 1 2 6 6  | 1  | 28 27 23 22 25 22 22 25 27 24 26 25 23  |   |
| 21 TIME        | 09 (0 11 12 13 14 15 16 17 18 19 20 21 22                            | 1175 1265 136 1375 142 1455 145 141 136 135 1175 955 95 97 97 126 134 141 130 135 1175 955 95 99 97 115 134 141 130 135 144 145 135 145 155 156 155 145 155 145 155 156 155 156 155 156 156 156 156 15   | 2 2 27 20 20 27 2 2 2 2 2 2 2 2 2 2 2 2   | 220 220 220 220 220 220 220 220 220 220  | 285 290 290 290 285 2825 2928 2928 300 300 270 466 260 270 270 270 28 28 28 20 290 20 290 290 290 290 290 290 290 2  | 10 P           | 26.0 27.0 37.5 36.0 37.0 30.0 30.0 24.0 25.5 23.1 18.19.1.2 19.15 4.0                       | 109 109 109 109 110 110 109 110 110 110                 | 28 27 28 29 30 30 28 30 30 30 27 27 27 27 27 27 27 27 27 27 27 27 27                                  | 23       |                              | 09 10 11 12 13 14 15 (6 17 18 19 20 21 22                            | 785 83 89 81 82 645 59 856 61 61 63 51 56 55 56 56 56 56 56 56 56 56 56 56 56  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 245 5-6 2-6 10 4-6 20 255 245 246 246 247 247 247 247 247 247 247 247 247 247   | 355 305 300 300 2875 300 255 575 500 205 205 205 205 205 205 205 205 20                                   | 1               | 215 225 230 2175 240 4 3 250 250 3 1 2 2 6 66                                     | 127 128 19 121 121 12  | 26 28 27 23 22 25 22 22 25 27 25 27 30 24 26 25 23  |   |
| 21 TIME        | 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                         | 105 1175 1265 136 1375 142 1455 145 141 136 135 1175 955 95 96 97 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98   | 280 275 280 290 200 270 200 270 200 270 200 270 200 270 200 270 200 270 27      | 2275 220 220 220 220 220 220 220 220 220 22  | 295 295 290 290 290 285 2825 2925 3925 300 290 460 260 270 270 270 270 280 280 280 280 280 280 280 280 280 28  | 10 F           | 29 25 23 16 21 16 19 12 19 15 4 1   | 109 109 109 109 109 110 109 119 119 119                 | 365 40 435 45 43 44 405 37 335 295 28 275 21 19   | 23       |                              | 08 09 10 11 12 13 14 15 (6 17 18 19 20 21 22                         | 9 645 715 785 83 89 81 82 615 89 895 81 61 61 63 51 56 55 8  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | U V V V V V V V V V V V V V V V V V V V   | 310 305 345 300 300 2875 900 205 2015 20 10 10 10 10 10 10 10 10 10 10 10 10 10                           | 1 1             | 210 215 225 230 2375 240 250 250 250 25 27 3 3 1 2 2 16                           | E2 E E E E E E E E E E E E E E E E E E   | 25 26 26 27 23 22 25 22 22 25 27 24 26 25 25 23   | SEPTEMBER.                                    |
| 21 TIME        | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 955 105 1175 1265 136 1375 142 1455 144 11 136 135 1175 955 9 9 97 104 1175 126 136 136 136 1375 142 1455 145 144 151 137 1375 195 95 96 96 96 96 96 96 96 96 96 96 96 96 96   | 280 275 280 280 27 280 280 280 280 280 280 280 280 280 280                      | 210 22275 2220 222 22 22 22 22 22 22 22 22 22 22   | 310 295 285 280 290 290 289 2823 2925 2925 300 300 290 660 260 270 270 270 283 310 300 300 300 300 299 280 289 30 299 28 20 28 20 28 28 28 28 28 28 28 28 28 28 28 28 28 | 10 F           | 290 330 360 370 375 380 370 360 340 240 240 25 25 23 33 18 21 18 19 12 19 15 4              | 29 30 29 28 28 28 30 27 25 20 3                         | 32 365 40 435 45 41 44 405 37 335 295 28 275 21 27 27 27 27 22 29 20 30 30 30 30 30 37 27 27 27 27    | 23       |                              | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 99 645 715 785 83 69 81 82 615 59 595 81 61 63 51 56 55 52 52 52 52 52 52 52 52 52 52 52 52  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 24  | 3.05 310 355 305 300 300 2575 300 255 275 205 275 205 275 205 205 205 205 205 205 205 205 205 20          | 1 1             | 215 225 230 2175 240 4 3 250 250 3 1 2 2 6 66                                     | ES E   | 22 25 25 26 26 27 23 22 25 22 22 25 27 24 26 25 25 25 25 27 24 26 25 25 25  | SECONDS. SEPTEMBER.                           |
| TABLE 21 TIME  | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 00 955 105 1175 1265 136 1375 142 1455 145 141 136 135 1175 955 9 9 97 22 8 26 105 1175 1265 136 141 136 135 145 147 141 136 135 9 9 9 97 97 95 104 117 126 134 144 146 146 155 155 156 150 144 145 136 114 136 136 156 156 156 156 156 156 156 156 156 15   | 280 275 480 395 335 220 270 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                     | 210 230 2275 220 20 20 20 20 20 220 220 220 20 20 20   | 320 310 295 295 290 290 290 285 2825 9925 2925 300 300 290 260 270 270 270 270 270 270 270 270 270 27  | 10 P           | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 28 29 30 29 28 25 28 28 30 27 25 20 3                   | 27 72 73 105 409 409 409 409 409 409 409 70 70 70 70 70 70 70 70 70 70 70 70 70                       | TABLE 23 |                              | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 565 59 645 715 785 83 99 81 82 645 595 61 61 63 51 56 55 62 62 82 27 62 62 69 64 69 65 64 64 65 64 64 65 64 64 64 64 64 64 64 64 64 64 64 64 64  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 240 25 25 25 25 25 25 25 25 25 25 25 25 25  | 300 305 310 305 305 305 309 300 2095 305 300 2095 2185 200 215 205 205 205 205 205 205 205 205 205 20     | 1 1             | 200 U U U 215 225 230 2375 240 259 259 259 25 25 25 25 25 25 25 25 25 25 25 25 25 | 1 2 155 175 125 119 120 117 115 110 127 4 3 1 1 1 2 N'   | 21 22 25 25 26 28 27 23 22 25 22 22 25 27 24 26 25 25 25 25 27 24 26 25 25 25   | SECONDS. SEPTEMBER.                           |
| TABLE 21 TIME  | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 695 90 995 105 1175 1265 136 1375 142 1455 145 141 136 135 1177 955 95 99 97 81 82 126 117 126 134 141 136 135 141 136 136 136 136 136 136 136 136 136 13  | 280 275 480 395 335 220 270 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                     | 20 230 230 2275 220 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 275 320 310 295 295 296 290 290 285 2825 2928 300 300 270 260 270 270 270 270 285 285 385 390 390 290 290 290 290 290 290 290 290 290 2                                  | 10 P           | 290 330 360 370 375 380 370 360 340 240 240 25 25 23 33 18 21 18 19 12 19 15 4              | 29 30 29 28 28 28 30 27 25 20 3                         | 16 27 22 365 40 445 45 43 44 405 37 335 295 28 275 21 27 27 27 27 27 27 27 27 27 27 27 27 27          | TABLE 23 |                              | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 9 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 285 300 305 110 305 305 305 307 3975 30 30 375 30 30 375 30 30 375 30 30 30 30 30 30 30 30 30 30 30 30 30 | 1 1             | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 2 15 5 12 12 19 12 12 15 17 5 4 12 127 5 4 13 1 1 2 2 19 14 17 17 5 4 12 12 17 4 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 24 26 25 23  | IN 13.5 SECONDS. SEPTEMBER.                   |
| TABLE 21 TIME  | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 00 955 105 1175 1265 136 1375 142 1455 145 141 136 135 1175 955 9 9 97 22 8 26 105 1175 1265 136 141 136 135 145 147 141 136 135 9 9 9 97 97 95 104 117 126 134 144 146 146 155 155 156 150 144 145 136 114 136 136 156 156 156 156 156 156 156 156 156 15   | 280 275 480 395 335 220 270 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                     | 270 260 230 230 220 220 220 220 220 220 220 22   | 260 275 320 310 285 289 289 280 280 280 280 280 280 280 280 280 280  | 106            | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 27 72 73 105 409 409 409 409 409 409 409 70 70 70 70 70 70 70 70 70 70 70 70 70                       | TABLE 23 |                              | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | \$4. 25 565 59 645 715 785 83 99 81 82 645 59 595 61 61 63 51 56 55 61 61 62 645 645 645 715 72 78 68 65 645 72 78 645 72 78 645 72 78 645 72 78 645 72 78 645 72 78 645 72 78 | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 2875 8875 260 2445 240 2445 2445 2445 245 245 245 245 245 245   | 20 20 20 20 20 20 20 20 20 20 20 20 20 2  | 1 1             | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 1 2 15 17 18 119 12 18 17 15 4 18 17 18 4 3 1 1 2 8 N'   | 19 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 24 26 25 23   | MC IN 13.5 SECONDS. SEPTEMBER.                |
| TABLE 21 TIME  | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 695 90 995 105 1175 1265 136 1375 142 1455 145 141 136 135 1177 955 95 99 97 81 82 126 117 126 134 141 136 135 141 136 136 136 136 136 136 136 136 136 13  | 250 275 280 275 280 275 280 275 280 275 280 280 280 280 280 280 280 280 280 280 | 20 230 230 2275 220 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 260 275 320 310 285 289 289 280 280 280 280 280 280 280 280 280 280  | 106            | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 16 27 22 365 40 445 45 43 44 405 37 335 295 28 275 21 27 27 27 27 27 27 27 27 27 27 27 27 27          | TABLE 23 | 10.05. 120.0W)               | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 5.25 54. 52. 565 59 645 715 785 83 69 81 82 613 59 595 81 61 63 51 56 55 63 64 61 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64   | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 9 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 285 300 305 110 305 305 305 307 3975 30 30 375 30 30 375 30 30 375 30 30 30 30 30 30 30 30 30 30 30 30 30 | (6)             | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 2 155 175 125 119 120 117 115 110 127 4 3 1 1 1 2 N'   | 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 24 26 25 23  | 25.0 MC IN 13.5 SECONDS.                      |
| TABLE 21 TIME  | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 6.5 6.95 00 955 105 1175 12.65 136 1375 14.2 14.5 14.1 136 135 1175 955 95 99 97 28 5.65 95 105 1177 12.6 134 14.1 14.1 14.1 14.1 14.1 14.1 14.1   | 250 275 280 275 280 275 280 275 280 275 280 280 280 280 280 280 280 280 280 280 | 230, 270, 260, 230, 230, 2217, 220, 220, 220, 220, 220, 220, 235, 230, 230, 230, 320, 320, 320, 320, 320   | 285 28-0 255 320 310 295 295 299 290 290 289 2825 2925 302 300 290 4.00 260 270 270 270 270 270 270 270 270 270 27   | 10 P           | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 28 27 27 29 30 29 28 27 28 29 30 30 28 30 30 30 27 27 27 27   | TABLE 23 | (80,05s 120,0W)              | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 5.25 54. 52. 565 59 645 715 785 83 69 81 82 613 59 595 81 61 63 51 56 55 63 64 61 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64   | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 2875 8875 260 2445 240 2445 2445 2445 245 245 245 245 245 245   | 20 20 20 20 20 20 20 20 20 20 20 20 20 2  | 1               | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 1 2 15 17 18 119 12 18 17 15 4 18 17 18 4 3 1 1 2 8 N'   | 19 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 24 26 25 23   | MC IN 13.5 SECONDS. SEPTEMBER.                |
| TABLE 21 TIME  | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 93 765 65 695 00 955 105 1175 1265 136 1375 142 1455 145 141 136 135 1175 955 9 9 9 7 107 86 80 81 99 104 114 125 126 126 135 135 135 135 135 135 135 135 135 135  | 250 275 280 275 280 275 280 275 280 275 280 280 280 280 280 280 280 280 280 280 | 250 230 270 260 230 430 2275 220 20 20 20 20 20 20 20 20 20 20 20 20   | 300 285 280 275 320 310 295 289 290 290 280 280 2825 2925 2925 300 300 290 660 260 270 270 270 270 280 280 280 280 280 280 280 280 280 28                                | 9-01           | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 29 28 27 27 27 29 30 29 28 27 28 29 30 30 28 30 30 20 30 37 27 27 27 27 27                            | TABLE 23 | (80,05s 120,0W)              | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22       | 9  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | U U U U U U U U U U U U U U U U U U U   | 1 1             | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 1 2 15 17 18 119 12 18 17 15 4 18 17 18 4 3 1 1 2 8 N'   | 20 19 21 21 22 25 25 26 26 27 23 22 25 22 27 22 25 27 25 25 27 24 26 25 23  | 1.0 MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER. |
| TABLE 21 TIME  | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 94 93 765 65 695 90 995 105 1175 1265 136 1375 142 1455 143 141 136 135 1175 955 95 99 97 27 28 28 28 28 28 28 28 28 28 28 28 28 28  | 250 275 280 275 280 275 280 275 280 275 280 280 280 280 280 280 280 280 280 280 | 290 250 230 270 260 230 230 220 230 230 220 220 220 250 230 230 250 250 250 250 320 300 310 h <sup>-1</sup> 29 29 29 28 27 27 29 20 20 230 230 250 250 250 250 250 250 250 250 250 25  | 285 300 285 260 275 320 310 295 289 290 290 290 289 2825 2925 2925 300 300 290 660 260 270 270 270 270 285 285 28 28 28 28 28 28 28 28 28 28 28 28 28                    | 9-01           | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 29 27 29 28 28 27 27 27 29 30 29 28 27 27 28 29 30 30 28 28 30 27 27 27 27 27 27 27 27 27 27 27 27 27 | TABLE 23 | STATION (80.05. 120.0W)      | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 57 25 25 54 54 25 265 59 645 715 785 81 9 81 82 615 59 595 81 61 61 51 56 55 60 60 60 60 60 60 60 60 60 60 60 60 60  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 140 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 2.60 2.60 2.55 2.55 2.00 2.55 2.00 2.55 2.50 2.50   | 1 1             | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 1 2 15 17 18 119 12 18 17 15 4 18 17 18 4 3 1 1 2 8 N'   | 26 24 24 25 25 25 25 26 26 27 23 22 25 25 25 27 23 25 25 25 27 27 25 25 27 24 26 25 23                                      | 1.0 MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER. |
| 21 TIME        | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 915 94 93 755 65 655 90 955 105 1175 1265 136 1375 142 1455 145 141 136 135 1177 955 95 99 97 106 107 107 107 107 107 107 107 107 107 107  | 20 275 280 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                | 30.55 280 280 280 280 270 260 230 2275 220 220 2275 220 220 220 220 220 220 280 280 320 300 310 h <sup>-1</sup> 30.55 280 280 280 280 280 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28 | 265 285 300 285 200 275 320 310 295 295 290 290 290 285 2825 2925 300 300 290 60 270 270 270 270 285 28 24 24 24 24 24 24 24 24 24 24 24 24 24                           |                | 145 230 290 130 360 375 360 375 360 30 200 200 175 23 26 29 25 25 33 16 31 18 19 12 19 15 4 | 20 28 22 10 109 109 109 109 109 109 110 109 1109 119 18 | 20 15 29 29 29 28 27 27 27 28 30 29 28 27 28 29 20 30 30 28 30 30 30 27 27 27 27 27 27                | TABLE 23 | 30 STATION (80.05. 120.0W)   | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 565 57 25 542 54 54 52 565 59 645 715 765 63 99 61 01 01 01 01 01 01 01 01 01 01 01 01 01  | 1 3 % 20 1155 215 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                          | 94.25 340 345 341 247 247 247 247 247 247 247 247 247 247   | U U U U U U U U U U U U U U U U U U U   |                 | 2 1 1 2 5 20 210 215 225 230 2375 240 4 3 55 27 3 3 1 2 2 16                      | 2 1 1 1 2 125 175 19 10 12 11 17 12 12 12 18 17 18 17 18 18 18 1 18 1  | 25 345 26 28 22 20 19 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 23 25 25 25 27 24 26 25 23                   | MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER.     |
| TABLE 21 TIME  | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 | 94 93 765 65 695 90 995 105 1175 1265 136 1375 142 1455 143 141 136 135 1175 955 95 99 97 27 28 28 28 28 28 28 28 28 28 28 28 28 28  | 20 275 280 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                | 3025 280 280 280 280 270 260 230 2275 220 220 220 220 220 220 220 220 220 22   | 265 285 300 265 260 215 320 310 295 295 290 290 290 285 2825 2925 2925 300 290 290 260 250 270 270 270 270 270 270 270 270 270 27  | 10 F           | 230 280 330 380 370 375 380 370 380 390 240 22 28 29 25 29 18 18 19 12 19 15 4              | 118 109 109 109 109 109 109 110 109 110 109 119 11      | 29 27 29 28 28 27 27 27 29 30 29 28 27 27 28 29 30 30 28 28 30 27 27 27 27 27 27 27 27 27 27 27 27 27 | TABLE 23 | 84RD STATION (80.05* 120.0W) | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 (6 17 18 19 20 21 22 | 57 25 25 54 54 25 265 59 645 715 785 81 9 81 82 615 59 595 81 61 61 51 56 55 60 60 60 60 60 60 60 60 60 60 60 60 60  | 20 21 25 275 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                       | 140 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | WEB 200 260 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | WED CHT 1 1 (6) | 2 5 5 5 5 5 5 6 27 8 8 27 8 8 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9                   | 1 1 2 125 125 126 19 12 11 15 121 127 13 14 15 1 18 18 18 18 18 18 18 18 18 18 18 18 1                                 | 345 28 24 25 20 19 21 21 22 25 25 26 28 27 23 22 25 25 25 27 23 22 25 25 25 25 27 23 25 25 25 25 25 25 25 25 25 25 25 25 25 | 1.0 MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER. |
| TABLE 21 TIME  | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 915 94 93 755 65 655 90 955 105 1175 1265 136 1375 142 1455 145 141 136 135 1177 955 95 99 97 106 107 107 107 107 107 107 107 107 107 107  | 20 275 280 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                | 30.55 280 280 280 280 270 260 230 2275 220 220 2275 220 220 220 220 220 220 280 280 320 300 310 h <sup>-1</sup> 30.55 280 280 280 280 280 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28 | 265 285 300 285 200 275 320 310 295 295 290 290 290 285 2825 2925 300 300 290 60 270 270 270 270 285 28 24 24 24 24 24 24 24 24 24 24 24 24 24                           |                | 145 230 290 130 360 375 360 375 360 30 200 200 175 23 26 29 25 25 33 16 31 18 19 12 19 15 4 | 20 28 22 10 109 109 109 109 109 109 110 109 1109 119 18 | 20 15 29 29 29 28 27 27 27 28 30 29 28 27 28 29 20 30 30 28 30 30 30 27 27 27 27 27 27                | TABLE 23 | 84RD STATION (80.05* 120.0W) | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 565 57 25 542 54 54 52 565 59 645 715 765 63 99 61 01 01 01 01 01 01 01 01 01 01 01 01 01  | 1 3 % 20 1155 215 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                          | 94.25 340 345 341 247 247 247 247 247 247 247 247 247 247   | U U U U U U U U U U U U U U U U U U U   |                 | 2 1 1 2 5 20 210 215 225 230 2375 240 4 3 55 27 3 3 1 2 2 16                      | 2 1 1 1 2 125 175 19 10 12 11 17 12 12 12 18 17 18 17 18 18 18 1 18 1  | 25 345 26 28 22 20 19 21 21 22 25 25 26 28 27 23 22 25 22 25 27 23 22 25 25 27 23 25 25 25 27 24 26 25 23                   | 1.0 MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER. |

| 10   10   10   10   10   10   10   10  |      | -      |        |     |    |               | i |       |       |   | ŀ   |     |    |       |     |       |     |     |        |    |    |    |      |      |     |           |                  |     |     | l      | l       | ŀ      |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
|--|------|--------|--------|-----|----|---------------|---|-------|-------|---|-----|-----|----|-------|-----|-------|-----|-----|--------|----|----|----|------|------|-----|-----------|------------------|-----|-----|--------|---------|--------|-------|-------|------|----------|-----|----|---|---|---|---------------|-----|-----|-------|---|-----|------------|-----------|
| March   Marc | HOUR | H      | Н      | П   |    | H             |   |       |       | H |     | +   | 12 | ū     | 4   | 10    | 9   | -   | 8      | 63 | 20 | 21 | 22   |      |     | НОП       | α                | 00  |     |        |         | +      |       |       |      | $\vdash$ | 1   |    | + |   |   | $\vdash$      |     |     | 61    | 20                                      | -5  | 22         | 23        |
|  |      |        |        |     |    |               |   |       |       | - |     |     |    | 72    | 72  | 74 26 | 75  | 78  | 79     | 23 |    | 72 |      |      |     | fo F2     | CNT              |     |     |        |         | -      |       |       |      |          |     |    |   |   |   |               |     |     | 31    | 2 5 5 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | 38  | 31         | 38        |
| The control of the  |      | L C C  |        |     |    |               |   |       |       |   |     |     |    |       |     | -     |     |     |        |    |    |    |      |      |     | h, F2     | CNT              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
| Column   |      | GF 60  |        |     |    |               |   |       |       |   |     |     |    |       |     |       |     |     |        |    |    |    |      |      |     | Н         | CNT              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
| The control of the  |      |        | l.     |     |    |               |   |       |       |   |     |     |    |       |     |       | 265 | 270 | 275 28 |    |    |    |      |      |     | (M 3000)F |                  |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     | 295   | 2 280                                   | 255 | 240        | 230       |
| Second   S |      | Z E    |        |     |    |               |   | 30    |       |   |     |     |    |       |     |       | 00% | 430 |        |    |    |    |      |      |     | fo F I    | MED              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
|  |      | N E    |        |     | 27 |               |   |       |       | _ | - 1 |     |    | 1     |     | 360   | 340 | 310 | ~      |    |    |    |      |      |     | 70 E      | MED              |     |     |        |         |        |       |       | Ε 11 | 10       |     |    |   |   |   |               | 0.6 |     |       |   |     |            |           |
| The color   The  |      | IED NT |        |     |    |               |   |       |       |   |     |     |    |       |     |       |     |     |        |    |    |    |      |      |     | ان<br>ح   | #ED<br>CNT       |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
|  |      |        |        |     |    |               |   |       |       |   |     |     |    | 00    |     | - 0   | 62  | 62  | 31     | 27 |    | 1  |      |      |     | fo Es     | MED              |     |     |        |         |        |       | 1 2 E |      | -        |     |    |   |   |   |               |     |     | 1 30  | 9 27                                    | 254 | 24         | 28        |
| Marco   Marc |      | - F    | SUMEB. | sou | 3  | AFR10         |   | 3.25. | 17,7E | - | - 1 | -   |    |       |     | 4     |     | - 1 | 9      | 9  | 2  | ē  | TIME | 15.0 | 3 - | 100       |                  | DEL | ÷   | ND I A | 128 + 6 | 5N. 77 | 7,2E) |       |      | -        |     |    |   |   |   | - 1           | - 1 | - 1 |       | 00                                      | ~   | 71ME 75.0E | 75.0      |
| Hand    | HOUR | +      |        | 1   |    | $\rightarrow$ |   |       |       | + |     | +   |    | 5     | 4   | 50    | 9   | -   | 00     | 6  | 2  | 72 | 22   |      | _   | HOL       | œ                | 8   | 0   | 05     |         | 04     |       |       |      | +        | - 1 | -1 |   |   |   | $\rightarrow$ | - 1 |     |       |   | - 1 |            |           |
| NF 2    | }    |        |        |     |    |               |   |       |       |   |     |     |    |       | 29  | 1098  |     |     |        |    |    |    |      |      |     | fo F2     | CNT              |     | 944 | 100    |         | 277    |       |       |      |          |     |    |   |   |   |               |     |     | 28 28 | 0<br>4 125<br>8 18                      | 110 | 1112       | 104<br>28 |
| Mail    |      | SESS   |        |     |    |               |   |       |       |   |     | 111 |    | 320   |     | 295   |     |     |        |    |    |    |      |      |     | h' F2     | CNT              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
| OUPT MED 1864 326 266 103 283 285 285 285 285 285 285 285 285 285 285  |      |        |        |     |    | _             |   |       |       |   |     |     |    |       | 228 | 235   | 241 |     | N      |    |    |    |      |      |     | īr.       | MED<br>CNT<br>U0 |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       | -                                       |     |            |           |
| MED   104 224 302 345 367 353 470   16F1 WED   16F CMT   15 30 36 375 369 386 375 369 386 375 369 386 375 369 386 3875 389 388 388 388 388 388 388 388 388 388   |      |        |        |     |    |               |   |       |       |   |     |     |    |       | 274 | 273   | 282 |     | ~      |    |    |    |      |      |     | (M3000)   |                  | 7   | -   |        |         | 4      |       |       |      |          |     |    |   |   | - |               |     | v v |       | in in                                   | 5 2 | 2          | -         |
| WED CMT 1194 224 502 345 3467 348 362 375 360 336 294 198  |      | (ED    |        |     |    |               |   |       |       |   |     | 0   |    | 5 8 3 |     | 533   |     |     |        |    |    |    |      |      |     | fo F1     | MED              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |
| NED 10 100 100 100 100 100 100 100 100 100   |      | N T    |        |     |    |               |   | 10    |       |   |     |     |    |       | 360 | 336   | 294 |     |        |    |    |    |      |      |     | fo E      | MED              |     |     |        |         |        |       |       | -    |          |     |    |   | 2 |   |               |     | _   |       |   |     |            |           |
| 0 E s  |      | N TEO  |        |     |    |               |   |       |       |   |     |     |    |       |     |       |     |     |        |    |    |    |      |      |     | ω<br>-ε   | NED              |     |     |        |         |        |       |       |      |          |     |    |   | ~ |   |               | -   | -   |       |   |     |            |           |
|  |      | MED    |        |     |    |               |   |       |       |   |     |     |    |       |     |       |     |     |        |    |    |    |      |      |     | fo Es     | CNT              |     |     |        |         |        |       |       |      |          |     |    |   |   |   |               |     |     |       |   |     |            |           |

TABLE 26

TIME 0.0

TABLE 25

INVERNESS. SCOTLAND (57.44N: 4.2W)

| 2000  | ~~         |           | 250 24                                  | 300 3                 |       |                  |         | 15          | -                             | ō        | 122  |          |       |                       |       |         |            |       |
|-------|------------|-----------|---|-----------------------|-------|------------------|---------|-------------|-------------------------------|----------|--|----------|-------|-----------------------|-------|---------|------------|-------|
|       | . 0.4      |           | 4.0                                     | 0.0                   |       |                  |         | ~~          | NO.                           | 8        | 2 2  |          |       |                       |       |         |            |       |
| Г     | 1          |           | 245 230 24 24                           | 24 24                 |       |                  |         | 21 17 24 24 | MADRAS. INDIA (13+1N+ 80+3E)  | 2 03     | 109 98<br>27 25                              |          |       |                       |       |         |            |       |
| 15    | +          |           | 270                                     | 260                   |       |                  |         | 7 E         | . N                           | 0.04     | 5 23   |          |       |                       |       |         |            |       |
| 2     |            |           | 270                                     | 25 22                 |       |                  |         | E 24        | 0.3E1                         | 90       | 5 73   |          |       | 3                     |       |         |            |       |
| 8     | +          |           | 260                                     | 285                   |       | 180              |         | 57          |                               | 90       | 30   |          |       | 315                   |       |         |            |       |
| 100   |            |           | 250                                     | 300                   |       | 270 340<br>18 14 | 113     | 28          |                               | 20       | 123  |          |       | 295                   |       |         |            |       |
|       |            |           | 250 2                                   | 280 2                 |       | 340              | 110 1   | 5 67        |                               | 90       | 29 29  |          |       | 260 2                 |       |         |            |       |
| 9     |            | 300 3     | 250 2                                   | 265 2 26              |       | 390 4            | 110 1   | 23 6        |                               | 60       | 30   |          |       | 230 2                 |       |         |            |       |
| 2     |            | 350 39    | 230                                     | 250 24                |       | 9004             | 21 11   | 0 91        | 1885E 31                      | 01       | 29 3   |          |       | 10 1                  |       |         |            |       |
| 2     | -          | 390 400   |   | 240 240 240           |       | -                | 110 110 |             | 10                            | -1       | 30 2   |          |       | 220 22<br>16 1        |       |         |            |       |
| -     | 0 -        | 23 400    |   | 22 22                 |       | 1 2              | 10 110  | ص<br>ع      |                               | 2 13     | 119 117<br>27 19                             |          |       | 220 215               |       |         |            |       |
| 3     | 0 -        | 0 400     |   | 2 22                  |       | U 4 000          | 0 110   | 3 6         |                               | <u>a</u> | 7 122  |          |       | 5 225<br>9 15         |       |         |            |       |
| 1     | 0 -        | 380       |   | 245                   |       | 390              | 0 110   | 0 0         |                               | 50       | 2 125  |          |       | 5 225                 |       |         |            |       |
| 9     | 0          | 350       | ~                                       | 245                   |       | 360              | 110     | 5 02        |                               | 9        | 30   |          |       | 4                     |       |         |            |       |
|       | 160        | 350       | 250                                     | 250                   |       | 290              | 115     | 5 72        |                               | 13       | 30   |          |       | -24                   |       |         |            |       |
| 9     | 161 20     |           | 265                                     | 255                   |       | 210              | 135     | 21 26       |                               | 8)       | 122  |          |       |                       |       |         |            |       |
| 0     |            |           | 300                                     | 245                   |       |                  |         | 15          |                               | 6        | 116  |          |       |                       |       |         |            |       |
| 5     |            |           | 340                                     | 240                   |       |                  |         | 62          |                               | 50       | 122  |          |       |                       |       |         |            |       |
| ê     |            |           | 310 3                                   | 255 2                 |       |                  |         | 24          | je:                           | 2        | 133 1  |          |       |                       |       |         |            |       |
| 33    |            |           | 300 3                                   | 263 2                 |       |                  |         | E 24        | TIME 75.0E                    | 22 6     | 131 1  |          |       |                       |       |         |            |       |
| 22 23 | 21         |           | 300                                     | 275                   |       |                  |         | 17          | *0E                           | 23       | 30   |          |       |                       |       |         |            |       |
| L     | fo F2      | -4<br>F 2 | <u>14</u>                               | (M3000)F2             | fo FI | اه<br>E          | ω<br>Έ  | 10 E        |                               |          | to F.2                                       | h, £2    | Ē.    | (M 3000) F2           | 10 51 | ٠٥<br>E | <u>'</u> E | fo Es |
| 0.00  |            | A S       | M S S S S S S S S S S S S S S S S S S S | O)F2 MED<br>CNT<br>UQ | MED   | MED              | MED     | MEO         |                               | HOUR     | ¥8551  | A S      | M S D | O)F2 MED<br>CNT<br>UQ | MEO   | MED     | MED        | MEO   |
| 9     | MEO 126    | CONT      | MED<br>CNT<br>LO                        | 0 F 0 0               | 05    | 85               | 05 F    | 3 =         | TIR                           | 00       | MED 125<br>CNT 7                             | CNT CONT | CONTO | 8400                  | 85    | 9.5     | 9:<br>-    | 0 F   |
| ā     | 116        |           |   | ~                     |       |                  |         |             | TIRUCHY. INDIA (10.8N. 78.7E) | 0        | 4  |          |       |                       |       |         |            |       |
| 3     |            |           |   | 4                     |       |                  |         |             | I NO I A                      | 05       | 102  |          |       |                       |       |         |            |       |
| FO.   | 0 0 0 0    |           |   | 4                     |       |                  |         |             | 110.8                         | 03 04    | 0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0      |          |       | -                     |       |         |            |       |
|       |            |           |   | 310 3                 |       |                  |         |             | 3N • 78                       | 0.4      | 0<br>8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |          |       |                       |       |         |            |       |
|       |            |           |   | 320 3,                |       |                  |         |             | •7E)                          |          | 1 9 7  |          |       | 340                   |       |         |            |       |
| 8     |            |           |   | 325 31                |       | 3,0              | , ic    |             |                               | 90       | 97 1   |          |       | 320 3                 |       |         |            |       |
| 0.7   |            |           |   | 310                   |       | 360              | 100     |             |                               | 07 08    | 120 136                                      |          |       | 305 270<br>10 13      |       |         |            |       |
| g     |            |           |   | 280                   |       | 7                | 120     |             |                               | 60 6     | 4 26   |          |       | 230                   |       |         |            |       |
| S     | 129        |           |   | 270                   |       | 430              | 120     |             | 1 4 8                         | 0        | 28 28  |          |       | 230                   |       |         |            |       |
| -     | 135        |           |   |                       |       | 077              | 120     |             | ABLE 32                       | =        | 118  |          |       | 230                   |       |         |            |       |
| 0     |            |           |   | 2                     |       |                  |         |             |                               | 12       | 118  |          |       | 225                   |       |         |            |       |
| -     |            |           |   | -                     |       |                  |         |             |                               | 5        | 118 1  |          |       | 225 24 24             |       |         |            |       |
| 5     | 133        |           |   |                       |       |                  |         |             |                               | 4        | 27   |          |       | 220                   |       |         |            |       |
| -     | 27 22 27 2 |           |   | - 2                   |       | ~                | 2       |             |                               | 60       | 128 1  |          |       | 225<br>19<br>20       |       |         |            |       |
| 17    |            |           |   |                       |       | 30               | 2 12    |             |                               | 91       | 130  |          |       | 225<br>225<br>5       |       |         |            |       |
| 17    | 0-         |           |   |                       |       | 300              | 120     |             |                               | 17 18    | 0.1  |          |       |                       |       |         |            |       |
| 6     |            |           |   | -                     |       |                  | -       |             |                               |          | 0 U<br>116 115<br>28 8                       |          |       |                       |       |         |            |       |
| 2     |            |           |   |                       |       |                  |         |             |                               | 02       | v. eo  |          |       |                       |       |         |            |       |
| 2     | 0 -        |           |   |                       |       |                  |         |             |                               | 1 1      | 114  |          |       |                       |       |         |            |       |
|       | 1 1        |           |   | 2                     |       |                  |         |             | TIME 75.0E                    |          | 115  |          |       |                       |       |         |            |       |
| 2     | 129        |           |   |                       |       |                  |         |             | 75.0                          |          | 122  |          |       |                       |       |         |            |       |

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|--|---|--|---|--|--|-----------|---------|-------------------|--|------------------|---|---|--|---|---|---|--|---|--|
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|  | 50                                      | -  |   |  |  |           |         |                   | ļ  |                  | 8   | 80 6 6 4 4 9  | ı  | 260<br>18<br>290<br>250   | 255 270 235   |   | 2  |   | 36   |
|  | 6                                       | 96   |   |  |  |           |         |                   |  |                  | 0   | 111   |  | 255<br>16<br>270<br>250   | 255   |   |  | ~   | 39   |
| March   Marc   |   |  |   |  |  |           |         |                   |  |                  | 60  | 83<br>12<br>101<br>69   |  | 260<br>270<br>250   | 270<br>10<br>270<br>255   |   | 3  | ~   | 12   |
| The color of the   |   | !  |   |  | 0 10   |           | 1       |                   |  |                  | -   | 85<br>98<br>69  |  |   |   |   | 230  | 3   | 32   |
| ## 15  |   | 1 i  |   |  |  |           |         | ĺ                 |  |                  | 9   | 113   |  |   |   |   |  | 15  | 32   |
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| The control of the    |   | 30   |   |  |  |           |         |                   |  |                  | 2   |   |  |   |   |   |  |   |  |
|  |   | 118  |   |  | 230  |           |         |                   |  | • W              | =   | 102   | 7  |   |   |   |  |   | 9  |
| Care      | 2                                       | 138  |   |  | 10   |           |         | }                 |  | AT10N<br>TABL    | 2   | 103   |  | 250<br>260<br>250<br>250  |   |   | 270  | 110   | 25   |
| 1  | n                                       | 141  |   |  | 18   |           |         |                   |  | OPER             | 60  | 101<br>109<br>109<br>80   | -  | 255<br>15<br>265<br>250   | 255<br>12<br>260<br>255   |   | 275  | 110   | 28   |
| Color   Colo   | 9                                       |  |   |  | 275  |           |         |                   | i  | NUAL             | 8   | 93<br>100<br>82   | 7  | 260<br>13<br>275<br>250   | 260<br>270<br>255   |   | 270  | 110   | 28   |
| The color of the   | ,                                       | -  |   |  |  |           |         |                   |  |                  | 20  | 9 6 6 6 7   | -  |   |   |   |  | 115   | 29   |
| Column   C   |   | 1  |   |  |  |           |         |                   |  | INUTE            | 90  | 10<br>10<br>10<br>40<br>10  |  |   |   |   |  | 120   | 30   |
| MATCH LINE AND THE STATE OF THE |   |  |   |  |  |           |         |                   |  | E E              | 90  | 62<br>11<br>74<br>38  |  |   |   |   |  | m   | 26   |
| ## 1   1   1   1   1   1   1   1   1   1   |   |  |   |  |  |           |         |                   |  | MC II            | 96  | 50  | **9  |   |   |   |  | 7   | 15   |
| MATCH LINE AND THE STATE OF THE | _                                       |  |   | -  |  | _         |         |                   |  | 18.0             | 2   |   |  |   |   |   |  | 7   | 30   |
| Column   C   |   |  |   |  | m  |           |         |                   |  | 0                | 2 0   |   |  |   | 0 5 5 5   |   |  | 2   |  |
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| Column   C   |   |  |   |  |  |           |         |                   |  |                  | 0   |   |  |   |   |   | е  | -   |  |
| C   C   C   C   C   C   C   C   C   C  | -                                       |  | 0500  | 0-00   |  | 0.5       | 0.5     |                   | -0.5   | 35               | ě   |   | 05.00  |   |   | 0.5   | 0 -  | 0.5   |  |
| Column   |   | A S S S  | A S S S                                     | A S D D  |  | ¥8        | N N     | N S               | S S  |                  |   | ₹ O O S   | No.  | AN DO   |   | ON  | NO   | ME  | <b>M</b> E<br>CN   |
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| Control   Cont   | _                                       |  |   | 10 Pt  | 0.0  |           |         |                   |  | Ø 3              | П   | <b>70</b>   |  |   |   |   | 10.41  | 0.0   |  |
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| March   100   110   12   |   | ]  |   |  |  |           |         |                   |  | APR II           | 22  |   |  |   |   |   |  |   |  |
| Marco   100   10   | 4                                       | 1 1  |   |  |  |           |         |                   | 32   |                  | 2   |   |  |   |   |   |  |   | 19   |
| MATCH 160 159 129 129 129 129 129 129 129 129 129 12   |   | 200  |   | 430  |  |           |         |                   |  |                  | 20  | 92  |  |   |   |   |  | 145   |  |
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| MATERY BAYS, AMARCTICA, 173-55, Abrewly  MATERY BAYS, AMARCTICA, 173-55, Abrew |   | 30   |   | 300  | 210  |           |         |                   |  |                  | 81  | 27  | 760  | 250   | 285   |   | 225  | 120   | 225<br>21  |
| March   15   |   | 130  |   | 260  | 220  |           | 2       | 110               | 82   |                  | 5   | 9 6 5 8   | 520  | 250   | 285   |   |  |   | E 26   |
| March   116   119   129   23   |   | 127  |   | 240  | 220  |           |         |                   | 104  |                  | 9   | 30  |  | 27  | 50  |   |  |   | 28   |
| Marie   Mari   |   | -  |   |  |  |           |         | _                 |  |                  | 1 1   |   | NA I   |   | ~   | - 4   |  |   |  |
| MET   15   15   15   15   15   15   15   1   | _                                       |  |   |  |  |           |         | 01                | 27   |                  | $\vdash$  |   |  |   |   | $\overline{}$   | 14   | 2-  | 144  |
| WKE    15   15   22   21   23   240   24   |   | 2.0  |   |  |  |           | ~       | 1 10              |  |                  | 51  | 30 30   | 0 4 4 4  | 250   | 285   | 04  |  |   |  |
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| MKD  |   | 116  |   | 210 215<br>27 26   | 210 210 26 26  |           |         | 1 1 6             | 139 129<br>28 26                                       |                  | 13 14 15  | 92 95 95<br>29 30 30  | 595 570 475<br>1 3 4   | 245 245 250 29 27   | 270 270 205<br>27 29 20   | 495 495 445   | 330 320  | 115 115 20  | E E 23 23 25 23  |
| MIT   10   10   10   10   10   10   10   1   |   | 117 116  |   | 205 210 215<br>26 27 26  | 210 210 210<br>27 28 26  |           | ,       | 1 1 6             | 144 139 129<br>27 28 26                                | v.               | 12 13 14 15                                     | 885 92 95 95<br>30 29 30 30   | 650 595 570 475<br>3 1 3 4   | 250 245 245 250<br>30 29 29 27  | 260 270 270 285<br>28 27 29 28  | 500 495 495 445<br>4 1 2 4  | 330 330 320<br>14 17 17  | 110 115 115   | 83 33 33<br>22 25 23   |
| MATER MED 110 115 122 2 3 21 28 27 29 29 29 29 29 29 29 29 29 29 29 29 29  |   | 118 117 116<br>28 27 28  |   | 210 205 210 215<br>28 26 27 26   | 215 210 210 210<br>28 27 28 26   |           |         | 1 1 0             | 140 144 139 129<br>28 27 28 26                         | ale 35           | 11 12 13 14 15                                  | 87 885 92 95 95<br>31 30 29 30 30   | 760 650 595 570 475<br>5 3 1 3 4   | 250 250 245 245 250<br>31 30 29 29 27   | 255 260 270 270 285<br>27 28 27 29 28   | 490 500 495 495 445<br>5 4 1 2 4  | 330 330 330 320<br>16 14 17 17   | 110 110 115 115<br>22 19 24 20  | 32 33 33 33 23 26 22 25 25 23  |
| MED 110 105 105 20 21 21 28 21 20 10 10 10 10 10 10 10 10 10 10 10 10 10   |   | 138 118 117 116<br>28 28 27 28   |   | 215 210 205 210 215<br>28 28 26 27 26  | 220 215 210 210 210<br>28 28 27 28 26  |           | ,       | 1 1 1             | 140 140 144 139 129<br>28 28 27 28 26                  | TABLE 35         | 10 11 12 13 14 15                               | 845 87 885 92 95 959<br>28 31 30 29 30 30   | 730 760 650 595 570 475  | 250 250 250 245 245 250<br>26 31 30 29 29 27  | 245 255 260 270 270 285<br>25 27 29 28  | 500 490 500 495 495 445<br>3 4 1 2 4  | 320 330 330 330 320<br>18 16 14 17 17  | 110 110 110 115 115<br>21 22 19 24 20   | 32 32 33 33 33 33 22 22 26 22 25 23                                    |
| MED 110 15 12 2 21 21 28 21 29 21 20 |   | 136 128 118 117 116<br>28 28 28 27 28  |   | 220 215 210 205 210 215<br>28 28 26 27 26  | 230 220 215 210 210 210 210 210 210 26 28 28 28 27 28 26   |           | T       | 2 3 1 1           | 126 140 140 144 139 129<br>28 28 27 28 26              | FABLE 35         | 09 10 11 12 13 14 15                            | 76 845 87 885 92 95 959<br>29 28 31 30 29 30 30   | 565 730 760 650 595 570 475<br>6 3 5 3 1 3 4   | 250 250 250 245 245 250 27 20 27 20 31 30 29 29 27  | 240 245 255 260 270 270 285 28 28 27 29 28  | 495 500 490 500 495 495 445<br>7 3 5 4 1 2 4                                | 315 320 330 330 330 320<br>20 18 16 14 17 17   | 115 110 110 110 115 115 24 20   | 25 22 26 22 25 23 23 23 23 23 23 23 23 23 23 23 23 23                  |
| MED 110 109 104 90 131 74 100 100 100 100 100 100 100 100 100 10   |   | 133 136 128 118 117 116<br>27 28 28 28 27 28   |   | 230 220 215 210 205 210 215<br>27 28 28 26 27 26   | 260 230 220 215 210 210 210 210 210 210 210 210 210 210  |           | -       | 8 2 1 1 1         | 116 126 140 140 144 139 129<br>27 29 28 28 27 29 26    | TABLE 35         | 08 09 10 11 12 13 14 15                         | U<br>76 76 945 87 885 92 95 95<br>29 29 28 31 30 29 30 30                                     | 510 565 730 760 650 595 570 U  | 250 250 250 250 250 245 245 250 27 27 27 26 31 30 29 29 27  | 230 240 245 255 260 270 270 285<br>22 28 25 27 28 27 29 28  | 495 495 500 490 500 495 495 445<br>8 7 3 5 4 1 2 4                          | 295 315 320 330 330 330 320<br>21 20 18 16 14 17 17  | 115 115 110 110 110 115 115<br>23 24 21 22 19 24 20   | E E E E E E E E E E E E E E E E E E E                                  |
| MED 110 109 102 29 29 29 29 29 29 29 29 29 29 29 29 29   |   | 133 136 128 118 117 116<br>27 28 28 28 27 28   |   | 240 230 220 215 210 205 210 215 28 28 27 26  | 290 260 230 220 215 210 210 210 210 28 28 28 27 28 26  |           | 290     | 8 2 1 1 1         | 116 126 140 140 144 139 129<br>27 29 28 28 27 29 26    | TABLE            | 07 08 09 10 11 12 13 14 15                      | U U U C 10 06-5 67 805 92 95 95 29 29 29 29 29 29 29 29 29 31 30 29 30 30                     | 520 510 565 730 760 650 595 570 U  | 255 250 250 250 250 250 245 245 245 27 27 28 31 30 29 29 27   | U 20 230 240 245 255 260 270 270 285 28 27 29 28  | 495 495 500 490 500 495 495 445<br>8 7 3 5 4 1 2 4                          | 295 315 320 330 330 330 320<br>21 20 18 16 14 17 17  | 115 115 110 110 110 115 115<br>23 24 21 22 19 24 20   | 27 295 315 32 32 33 33 33 23 24 22 25 23 25 23                         |
| MED  |   | 116 133 136 128 118 117 116<br>7 28 28 28 27 28  |   | 240 230 220 215 210 205 210 215 28 28 27 26  | 300 290 260 230 220 215 210 210 210 210 210 210 210 210 210 22 28 28 28 28 28 28 28 28 28 28 28 28                   |           | 290     | 24 8 2 1 1 1      | 72 116 126 140 140 144 139 129 28 27 28 26 26          | SECONDS.  26-681 | 06 07 08 09 10 11 12 13 14 15                   | 10 10 10 10 10 20 20 20 20 20 31 30 20 30 30 30 30  | 520 510 565 730 760 650 595 570 U  | 255 250 250 250 250 250 245 245 245 27 27 28 31 30 29 29 27   | U 20 230 240 245 255 260 270 270 285 28 27 29 28  | 460 495 495 500 490 500 495 495 445   | 270 295 315 320 330 330 330 320<br>22 21 20 18 16 14 17 17   | 115 115 110 110 110 115 115 12 22 23 24 21 22 19 24 20  | E E E E E E E E E E E E E E E E E E E                                  |
| 00 00 00 00 00 00 00 00 00 00 00 00 00   |   | 96 116 133 136 128 118 117 116<br>1 27 28 28 28 27 28  |   | 260 240 230 220 215 210 205 210 215 25 29 28 26 27 26  | 300 290 260 230 220 215 210 210 210 210 210 210 210 210 210 22 28 28 28 28 28 28 28 28 28 28 28 28                   |           | 290     | 24 8 2 1 1 1      | 72 116 126 140 140 144 139 129 28 27 28 26 26          | SECONDS.  26-681 | 06 07 08 09 10 11 12 13 14 15                   | U U U U U U U U U U U U U U U U U U U   | 11 27 56 56 730 760 650 595 570 U5   | 260 255 250 250 250 250 250 250 245 245 245 250 22 27 27 20 31 30 29 29 27                                      | 0 0 0 120 245 245 245 240 270 270 289 17 21 22 28 25 27 28 27 29 28   | 430 460 495 495 500 490 500 495 495 445                                     | 260 270 295 315 320 330 330 330 320<br>18 22 21 20 18 16 14 17 17                                  | 120 115 115 115 110 110 110 115 115 115 11  | E E E E E E E E E E E E E E E E E E E                                  |
| 00 00 00 00 00 00 00 00 00 00 00 00 00   |   | 74 66 116 133 136 128 118 117 116 28 27 28 28 27 28 28 28 27 28  |   | 225 260 240 230 220 215 210 205 210 215 29 29 28 27 28 28 28 26 27 26                              | 310 300 290 260 230 220 215 210 210 210 210 210 210 210 210 20 28 28 28 28 28 28 28 28 28 28 28 28 28                |           | 290     | 24 8 2 1 1 1      | 1 9 28 27 29 28 28 27 29 26 28 27 29 26 26             | SECONDS.  26-681 | 05 06 07 08 09 10 11 12 13 14 15                | U U U U U U U U U U U U U U U U U U U   | 495 480 920 510 545 730 760 650 595 570 475 10 11 7 8 66 73 5 9 3 1 3 4                      | 295 280 255 250 250 250 250 250 250 245 245 245 240 25 22 27 27 27 20 31 30 29 29 27                            | U U U U 20 20 230 230 246 255 265 270 270 270 285 28 25 27 29 27 29 28  | 410 430 460 495 495 500 490 500 495 495 445 10 11 7 8 7 3 5 4 1 2 4         | 230 260 270 295 315 320 330 330 330 320<br>15 18 22 21 20 18 16 14 17 17                           | 120 120 115 115 110 110 110 115 115 115 115 11  | 23 26 27 295 315 32 32 33 33 33 33 22 22 21 24 23 25 22 26 22 25 23    |
| 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |   | 83 74 86 116 133 136 138 118 117 116 21 28 29 29 29 27 28  |   | 230 225 260 240 230 220 215 210 205 210 215 29 29 29 29 27 28 28 28 26 27 26                       | 305 310 300 290 260 230 225 215 210 210 210 210 210 210 210 210 210 210  |           | 290     | 24 8 2 1 1 1      | 1 1 9 28 27 29 28 28 27 29 26 26 26 27                 | SECONDS.  26-681 | 04 05 06 07 08 09 10 11 12 13 14 15             | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 480 495 480 520 510 565 730 760 650 595 570 475 475 6 10 11 7 8 6 73 5 5 5 5 5 5 5 5 5 6 475 | 340 795 260 255 210 250 250 250 250 245 245 246 250 25 25 25 25 25 25 25 25 25 25 25 25 25                      | U U U U U U U U U U U U U U U U U U U   | 380 410 430 460 499 495 500 490 500 495 495 445 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 210 230 260 270 295 315 320 330 330 320 170 11 15 18 22 21 20 18 16 14 17 17                       | 125 120 120 115 115 115 110 110 110 115 115 115 11  | E E E E E E E E E E E E E E E E E E E                                  |
| 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 03 04 03 04 05 10 11 15 13 14 13        | 90 83 74 86 110 133 130 138 118 117 110 23 21 29 27 28 27 29 28 28 27 28   |   | 240 230 225 260 240 230 220 215 210 205 210 215 20 210 215 20 20 20 20 20 20 20 20 20 20 20 20 20  | 295 305 310 300 290 260 230 220 215 210 210 210 210 210 210 210 210 210 210  |           | 290     | 24 8 2 1 1 1      | 2 1 1 9 2 8 2 7 2 8 2 8 2 7 2 8 2 8 2 8 2 8 2 8        | SECONDS.  26-681 | 03 04 05 06 07 08 09 10 11 12 13 14 15          | 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 480 495 480 520 510 565 730 760 650 595 570 475 475 6 10 11 7 8 6 73 5 5 1 3 4               | 350 340 285 280 255 250 250 250 250 280 245 245 245 245 245 245 250 250 245 245 245 245 245 245 245 245 245 245 | U U U U U U U U U U U U U U U U U U U   | 380 410 430 460 499 495 500 490 500 495 495 445 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 170 210 230 240 270 295 315 320 330 330 330 320 320 320 320 320 320                                | 150 125 120 120 115 115 115 110 110 110 115 115 120 110 115 120 120 120 120 120 120 120 120 120 120 | 17 E E E E E E E E E E E E E E E E E E E                               |
| 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |   | 104 96 83 74 86 116 113 136 138 118 117 116 22 23 21 28 27 28 27 28 28 28 27 28                                  |   | 240 240 230 225 260 240 230 220 215 210 205 210 215 29 29 29 29 29 29 29 28 27 28 28 26 27 26      | 280 295 305 310 300 290 280 230 220 215 210 210 210 210 220 22 23 23 21 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28 |           | 290     | 24 8 2 1 1 1      | 2 2 1 1 9 28 27 28 28 27 28 28 27 28 26 28 27 28 26 28 | SECONDS.  26-681 | 02 03 04 05 06 07 08 09 10 11 12 13 14 15       | U U U U U U U U U U U U U U U U U U U   | 480 495 480 520 510 565 730 760 650 595 570 475 475 6 10 11 7 8 6 73 5 5 1 3 4               | 355 350 340 295 260 255 250 250 250 250 250 250 250 250 25  | 20 20 20 20 20 20 20 20 20 25 25 27 29 27 29 28   | 380 410 430 460 499 495 500 490 500 495 495 445 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 170 U U 210 230 260 270 295 315 320 330 330 330 320 320 470 17 17 17 17 17 17 17 17 17 17 17 17 17 | 129 150 125 120 120 115 115 115 110 110 110 115 115 115 11  | 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                |
| 20) F2   |   | 0<br>109 104 96 83 74 86 116 133 136 138 119 117 116<br>15 22 23 21 28 27 28 27 28 28 28 27 28                   |   | 240 240 240 250 255 260 240 250 250 215 210 205 210 215 25 25 25 25 25 25 25 25 25 25 25 25 25     | 0 280 285 305 310 300 290 280 230 220 215 210 210 210 210 110 2 2 2 2 2 2 2 2 2 2                                    |           | 290     | 24 8 2 1 1 1      | 4. 2 2 1 1 9 28 27 28 28 28 27 29 26 26                | SECONDS.  26-681 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15    | U W U U U U U U U U U U U U U U U 1355 92 95 955 20 23 25 24 26 26 29 29 29 28 31 30 29 30 30 | 480 495 480 520 510 565 730 760 650 595 570 475 475 6 10 11 7 8 6 73 5 5 1 3 4               | 350 355 350 340 295 260 255 250 250 250 250 250 245 245 245 250 27 27 27 26 31 30 29 29 27 27                   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 380 410 430 460 499 495 500 490 500 495 495 445 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 170 170 170 170 170 171 15 18 22 21 20 18 15 15 170 17 17 17                                       | 145 120 150 150 120 120 115 115 115 110 110 110 115 115 115 15 15 15 15 15 15 15 15 15              | 1 16 17 22 23 21 22 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25    |
|  | 2 | 116 109 104 96 83 74 86 116 133 136 138 118 117 116 10 15 22 23 21 28 27 28 27 28 28 28 28 27 28                 | 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0     | 260 240 240 240 230 225 260 240 230 220 215 210 205 210 215 20 20 20 20 20 20 20 20 20 20 20 20 20 | 0 280 280 295 305 310 300 290 260 230 220 215 210 210 210 210 110 110 110 110 110 110                                | J. W. G.  | 200 290 | 125 110 6 2 1 1 1 | 62 4 2 2 1 1 9 28 27 29 28 28 27 29 26 6 27 29 26      | SECONDS.  26-681 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15    | 10 U U U U U U U U U U U U U U U U U U U  | 3 46 10 11 7 18 66 73 5 60 650 595 570 475   | 345 350 385 380 340 295 280 255 350 250 250 250 265 245 246 250 27 27 27 27 27 20 31 30 29 29 27 27             | 240 235 230 235 230 230 230 230 240 245 255 27 280 277 270 286<br>8 6 10 10 12 16 17 21 22 28 25 27 28 27 29 28 | 350 380 410 410 460 495 495 500 490 500 495 495 445                         | V V V V V V V V V V V V V V V V V V V  | 140 145 170 150 150 120 110 1115 115 110 110 110 115 115 110 110                                    | 15 17 16 17 22 23 21 22 2 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25 |
|  | S                                       | MED 116 109 104 96 83 74 86 116 1133 136 128 118 117 116 CdT 10 15 22 23 21 28 27 28 27 28 27 28 27 28 27 28 0.0 | 교 등 이 의 기 의 기 의 기 의 기 의 기 의 기 의 기 의 기 의 기 의 | 260 240 240 240 230 225 260 240 230 220 215 210 205 210 215 20 20 20 20 20 20 20 20 20 20 20 20 20 | MED 280 280 280 295 305 310 300 280 280 230 220 215 210 210 210 00 00 00 00 00 00 00 00 00 00 00 00 0                | O.M.<br>W | 200 290 | 125 110 6 2 1 1 1 | 62 4 2 2 1 1 9 28 27 29 28 28 27 29 26 6 27 29 26      | SECONDS.  26-681 | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 | 10 U U U U U U U U U U U U U U U U U U U  | 3 46 10 11 7 18 66 73 5 60 650 595 570 475   | 345 350 385 380 340 295 280 255 350 250 250 250 265 245 246 250 27 27 27 27 27 20 31 30 29 29 27 27             | WED 240 23 230 230 235 230 230 230 230 230 230 230 245 25 27 29 28 20 20 20 20 20 20 20 20 20 20 20 20 20       | 350 380 410 410 460 495 495 500 490 500 495 495 445                         | V V V V V V V V V V V V V V V V V V V  | 140 145 170 150 150 120 110 1115 115 110 110 110 115 115 110 110                                    | 1 16 17 22 23 21 22 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25    |

TABLE 33

| TIME 75.0M                   | 20 21 22 23 | 56 54 54 54<br>21 21 23 21         | 450 490 500 450<br>20 11 14 12        | 230 240 240 240<br>18 19 21 19 |                         | 410 400 420 400<br>21 15 16 16 | 300 290 280 280                | 4.7                            | 105 110       |
|------------------------------|-------------|------------------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------|--------------------------------|--------------------------------|---------------|
|                              | 61 81 21    | 58 56 55<br>20 19 19               | 520 460 520<br>13 11 17               | 220 220 230<br>19 19 19        |                         | 450 440 430<br>19 18 18        | 0 310 300 300<br>7 17 16 19    | 4                              | 105 105 105   |
|                              | 13 14 15 16 | 59 60 60 57 20 17 18 18            | 480 480 490 490                       | 220 210 220 210<br>18 18 20 18 |                         | 470 470 470 460<br>18 17 19 20 | 320 320 320 310<br>17 18 18 17 | 105 105 105 105                |               |
|                              | 10 11 15    | 60 59 60<br>20 21 20               | 510 490 500<br>13 13 15               | 220 210 210<br>17 15 13        |                         | 480 480 480<br>17 20 18        | 320 320 320<br>15 16 15        | 105 105 105<br>16 15 15        |               |
|                              | 00 00 00    | 2 57 58 56<br>5 17 18 19           | 0 510 510 520<br>5 11 11 12           | 6 220 220 220<br>5 13 15 18    |                         | 0 470 480 480<br>5 17 19 21    | 6 15 16 18                     | 15 105 105 105<br>6 14 17 17   |               |
| (82,6N, 62,6W)               | 03 04 05 06 | 52 54 51 52<br>20 16 17 15         | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 240 230 220 220<br>18 15 14 15 |                         | 400 430 440 450<br>17 16 18 15 | 290 300 300 300<br>17 13 15 16 | 110 105 105 105<br>17 13 16 16 | 19 17 18 18   |
| ALERI. CANADA (8             |             | 53 56 58<br>19 22 19               | 12 10 13                              | 240 250 250 2                  |                         | 400 400 420 4                  | 280 280 290 2<br>22 20 14      | 110 110 110 1                  | 22 21 17      |
|                              | HOUR        | % F2 MEO CNT UQ UQ                 | h' F2 ME0<br>CNT<br>UQ                | h' F MED CNT UD                | (M3000)F2 MED CNT UQ UQ | fo FI MED                      | fo E MED                       | h'E MEO                        | fo Es MED CNT |
| E 75.0W                      | 23          | 25 24                              | m                                     | 1 2                            |                         | 0 400<br>2 18                  | 0 260                          |                                | 3 13          |
| TIME                         | 20 21 22    | 53 52                              | w<br>-4                               | 2                              |                         | 400 400 400                    | 280 280 260<br>11 11 10        |                                | 14 15 13      |
|                              | 17 18 19    | 53 55 54                           | 500 500<br>4 5 5 5                    | 2 2 1                          |                         | 420 420 420<br>23 24 24        | 300 290 290<br>13 11 11        |                                | 16 15 15      |
|                              | 14 15 16    | 54 55 52<br>17 21 23               | 4                                     | T T                            |                         | 450 450 450                    | 310 300 300<br>12 12 12        |                                | 19 14 16      |
|                              | 11 12 13    | 57 55 58<br>19 17 18               |                                       | m m                            |                         | 460 460 460                    | 310 320 310                    |                                | 36 18 18      |
| 7 900                        | 01 60 80    | 56 54 55<br>17 18 15               | 3                                     | 6 2                            |                         | 460 460 460 4                  | 300 310 310 3                  |                                | 15 14 14      |
| -                            | 06 07       | 50 52 54<br>20 19 19               | 6                                     | 8 3                            |                         | 430 430 440 41                 | 290 300 300 300 31             |                                | 13 12 13      |
| 2.61                         | 04 05       | 21 23 2                            |                                       | 2 8                            | •                       | 410 420 440 43                 | 270 280 290 29<br>10 10 10 1   |                                | 14 12 12 1    |
| A (82.6N. 6                  | 03          | 0                                  |                                       |                                |                         | 4 1                            |                                |                                |               |
| ALERT. CANADA (82.6N. 62.6M) | 00 01 02 03 | ME0 52 53 56<br>CNT 21 23 21<br>UQ | MED S 6 CNT 5 6 LO                    | MEO<br>CNT<br>LO               | MED<br>CNT<br>UQ        | ME0 400 400<br>CNT 18 20       | U 250 270 CNT 8 13             | MEO                            | MED 14        |

10

TABLE 38

|                          | ٥                   |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       | - 1   |          | ' 1        | . ]   |          |            |                  | 0000 | OECEPCION : 103.03. 00.W | -    | 2             |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                | 9          |
|--------------------------|---------------------|----------------------------|-------------------------|-------|---|--------|------------|-----------------|-----|-----------------|-----------|----------|---------------|---|---|----------|----------|----------------|-------|-------|-------|----------|------------|-------|----------|------------|------------------|------|--------------------------|------|---------------|--------|-----|-------|---|--------|--------|------------------|----------------|-------|-----|-------|---------------|-----|-----|-------|-------|----------------|------------|
| HOUR                     | °                   | 00                         | 1 00                    | 2 03  | 8                                       | 8      | 8          | 07              | 90  | 60              | 0         | =        | 2             | 5                                       | 14                                      | 52       | 9        | 17             | 9     | 6     | 20    | 2 12     | 22 2       | 23    |          | HOUR       |                  | 8    | õ                        | 8    | 0.3           | 8      | 90  | 8     | 20                                      | 0 80   | 60     | 10               | 12             | 2     | 4   | €     | و             | ~   | B   | 6     | 50    | 21 22          | 23         |
| ¥627                     | CNE                 | 11 11 1                    | 33 3<br>11 1            | 34 34 | 36                                      | 33     | 35         | 34              | 37  |                 | 9 7 7     | 100      | 0<br>111<br>9 | 127                                     | 116                                     | 105      | 92       | 12             | 4 16  | 13    | 2,6   | 36<br>11 | 36         | 32    | fo F2    | 2          | MED<br>CNT<br>UO | 90   | 0 16 8                   | 77   | 96            | 6 9    | 89  | 7.3   | 9 0 1                                   | 1001   | 100 1  | 92 96            | 98 96<br>10 1D | 91    | 91  | 13    | 13            | 11  | 12  | 12    | 11    | 89 88<br>10 10 | 280        |
| ¥6,                      | MED<br>CNT<br>UO    |                            |                         |       |   |        |            | 235             | 240 | 210             | 205       | 200      | 190           | 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 195                                     | 200      | 200      | 13             | 13    |       |       |          |            |       | h.<br>F2 | 2          | CNT              |      |                          |      |               | 004    | 0 4 | 380 3 | 380                                     | 360 42 | 420 36 | 360 350          | 360            | 305   | 290 | 300   | 0<br>430<br>1 |     |     |       |       |                |            |
| 350                      | MED 36              | 360 36                     | 360 355                 | 5 340 | 300                                     | 0 280  | 260        | 235             | 240 | 225             |           | 200      |               |   |   | 200      |          | 190            |       | 200   | 210 2 | 260 2    | 245 3      | 355   | ic ic    |            | MEO<br>CNT<br>LO |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| (M3000)F2 ME             | MEO 24<br>CNT<br>U0 | 240 24                     | 245 245<br>10 10        | 245   | 255                                     | 260    | 275        | 275             | 270 | 285             | 320       | 325      | 335           | 315                                     | 34.5                                    | 340      | 335      | 330            | 330   | 320   | 320 2 | 265 2    | 250 2      | 245   | (M 3)    | (M 3000)F2 | MED<br>CNT<br>UO | 260  | 250                      | 560  | 255           | 540    | 260 | 270 2 | 2 80 2                                  | 10 1   | 275 29 | 295 300<br>12 10 | 10 300         | 310   | 315 | 320   | 325           | 320 | 320 | 330 3 | 315 2 | 295 280        | 0 265      |
| S N                      | MEO                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       |       |          |            |       | to F     |            | MED              |      |                          |      |               | 250    | 350 | 007   | 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 490 54 | 540 55 | 550 580          | 90 570         | 2 560 | 570 | 7 999 | 2005          |     |     |       |       |                |            |
| CN                       | MED                 |                            |                         |       |   |        |            |                 | 150 | 270             | 180       |          |               |   |   |          |          |                |       |       |       |          |            |       | ъ<br>В   |            | MEO              |      |                          |      |               |        |     |       |   |        |        |                  |                |       | 1   |       |               |     |     |       |       |                |            |
| CN                       | MED                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       |       |          |            |       | , e      |            | MEO              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| ME                       | MED                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       |       |          |            |       | to Es    |            | MED              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
|                          | ō                   | OECEPCION 1. 163.05. 60.7W | ON I.                   | 163.6 | 35. 60                                  | 3/2    |            |                 |     |                 | TABL      | TABLE 43 |               |   |   |          |          |                |       |       |       | Ξ        | TIME 60.0W | м0.   |          |            |                  | ALER | ALERI. CANADA            | AOA  | 182.5N* 62.5W | 1. 62. | 3   |       |   |        | 1      | TABLE 4          | 3              |       |     |       |               |     |     |       |       | Ē              | TIME 75.0W |
| HOUR                     | ŏ                   | 00                         |                         | 03    | 0.4                                     | 90     | 90         | 07              | 80  | 8               |           |          | 2             | 5                                       | 4                                       | 40       | و        | 17             | 9     | 6     | 20    | 2   2    | 22 22      | 23    |          | HOUR       |                  | 00   | 0                        | 05   | 63            | 0.4    | 90  | 90    | 0.7                                     | 80     | 60     | 0                | =              | 10    | 4   | 5     | 9             | =   | 9   | õ     | 02    | 21 22          | 2 23       |
|                          | CONTO               | 94 91 2 7                  | 0 16 16 21 91 91 6      |       | 0 00 00 00 00 00 00 00 00 00 00 00 00 0 | 0 01   | 76         |                 | 200 | 0 8 2 7         | 9 2 2 2   | 90       | 90 7          | 79                                      | 2 2                                     | 7.8      |          | 27.0           | 92 4  | 9 8 1 |       |          |            | 2 2 2 | fo F 2   | 2          | MEO<br>CNT<br>UQ |      | 52                       | 25.0 | 25            | 2.5    | 21  | 22    | 6.42                                    |        | 6D 6   |                  | 21 23          | 3 23  | 76  | 90    | 74 21         | 21  | 22  | 20 20 | 568   | 25 2           | 22 24      |
| N.S.                     | ONT CONT            | 325 35<br>2                | 350 360<br>6 5          | 5 360 | * 10<br>5                               | 0 450  | 430        | 0 4 5 5 5       | 450 | 254             | 0 4       | 450      | 510           | 515                                     | 7 | 130      | 2 t 20 E | 24<br>24<br>24 | 420   | 330   | 300   | 320 3    | 340 3      | 350   | h'F2     | 2          | CNT              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| SAM                      | MED CNT             | n 1                        | 2                       | 3 1   | 310                                     | 0 250  | 240<br>240 | 250<br>250<br>3 | 225 | 260             | 22 0<br>1 | 220      | 220           | 325                                     | 2 2 2 2 2 2                             | 315      | 230      | 275            | 260   | 280   | 300 2 | 255 3    | 300 3      | 310   | ,e       |            | MEO<br>CNT<br>UQ | 300  | 300                      | 320  | 310           | 300    | 300 | 300   | 300 3                                   | 310 36 | 300 30 | 28 2             | 310 300 24 28  | 300   | 290 | 300   | 300           | 310 | 300 | 300   | 310 3 | 310 300 26 28  | 0 300      |
| (M3000) F2 ME<br>CN<br>U | LO CNT              | 242 25                     | U U<br>250 245<br>245 3 | 5 245 | 3 245                                   | 2 4 5  | 252        | 235             | 245 | 250<br>250<br>3 | 255       | 255      | 240           | 242                                     | 260                                     | 255      | 255      | 265            | 255   | 270   | 265 2 | 250 2    | 260 2      | 255   | (M3      | (M3000) F2 | CNT              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| CN                       | MED                 | 2 4                        | 2 0                     | 3 240 | 390                                     | 6 4 50 | 0.04       | 530             | 580 | 570             | 550       | 560      | 009           | 0000                                    | 580                                     | 0<br>580 | 950      | 2 600          | 2 2 2 |       | 710   | 920 4    | 7 690      |       | fo F.I   |            | MED              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| ME                       | MEO                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       | l     |          |            |       | 9 P      |            | MED              | ~    | 2                        |      | ~             | ~      |     | 2     |   | 2      | ~      |                  |                |       | ~*  |       |               | -   | -   |       | -     |                | _          |
| M O N                    | MED                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       |       |          |            |       | Ē        |            | MEO              | -    | ~                        |      |               | į      |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
| ME                       | MED                 |                            |                         |       |   |        |            |                 |     |                 |           |          |               |   |   |          |          |                |       |       |       |          |            |       | to Es    | ul         | MED              |      |                          |      |               |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |
|                          |                     |                            |                         |       |   |        |            | 1               |     |                 |           | 1        |               |   |   | 1        |          |                |       | 1     |       |          |            | 7     |          |            |                  |      |                          |      | 1             |        |     |       |   |        |        |                  |                |       |     |       |               |     |     |       |       |                |            |

TABLE 42

|               |  |  |   |  |   |   |                                    |         |            |  | -  |  |  |   |  |  |  |   |                |
|---------------|--|--|---|--|---|---|------------------------------------|---------|------------|--|--|--|--|---|--|--|--|---|----------------|
| 15.0E         | 23   | 58   |   | 390  | 240   |   |                                    |         | 39         | T1ME 60.0W                             | 23   | 98   |  | 400   | 220  |  |  |   | 22             |
|               | 23   | U<br>56<br>18  |   | 370  | 250   |   |                                    |         | 33         | 3 WE                                   | 55   | 29   |  | 420   | 220  |  |  |   | 5.5            |
|               |  | 13   |   | 350  | 270   |   |                                    |         | 35         |  | 21   | 30   |  | 420   | 215  |  |  |   | 57             |
| - 1           |  | U 45<br>15   |   | 340  | 270   |   | 280                                |         | 39         |  | 50   | 27   |  | 395   | 220  |  |  |   | 189            |
|               | -  |  |   | 280 3  | 270 2   |   | 2                                  |         | 34         |  | 6  | 262  | 4 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                    | 330   | 230 2  |  |  |   | 21             |
|               | 6  | U 56   |   |  |   |   | 0 -1                               |         | 31         |  | H  |  | 430 4  | 18 3  | 230 2  |  | 285  | 118   | 38             |
|               | 18   | 19   |   | 260  | 10  |   | 260                                |         |            |  | 9  | 4 101  |  |   |  | - 0  |  |   |                |
|               | 12   | 22   |   | 245  | 290   |   |                                    |         | 31         |  | -  | 104  | 13   | 255   | 235  | 570  | 345  | 119   | 24             |
|               | 9  | 23   |   | 230  | 290   |   |                                    |         | 30         |  | 9  | 108  | 2 N N N N N N N N N N N N N N N N N N N                    | 245   | 235  | 600  | 395  | 119   | 21             |
|               | 50   | 120  |   | 230  | 290   |   |                                    |         | 22         |  | 5  | 115  | 460  | 245   | 235  | 630  | 430  | 119   | 13             |
|               | 4  | 129<br>26  |   | 230  | 280   |   | 170                                | 33      | 23         |  | -  | 116  | 470  | 11  | 230  | 140  | 4400   | 117   | 52             |
|               | 5  | 138  |   | 240  | 280   |   | 200 22                             | 135     | 52         |  | 5  | 117  | 23   | 250   | 230  | 15   |  | 114   | 11             |
|               | 12   | 136  |   | 240  | 12  |   | 210                                | 135     | 20         |  | 2  | 118  | 475  | 245   | 230  | 670  |  | 109   | 100            |
|               | =  | 27 1   |   | 245 2  | 280 2   |   | 210 2                              | 140     | 200        | 89                                     | -  | 21   | 485  | 235   | 230  | 0690   |  | 120   | 13             |
|               |  |  |   | 250 2  | 290 2   |   | 200 2                              | 120 1   | 4          | TABLE                                  | 0  | 112 1  | 7 567  | 250 2   | 225 2  | 11   |  | 113 1   | 18             |
|               | 9  | 2 108  |   |  |   |   |                                    |         |            | -                                      |  |  |  |   |  |  |  |   | 18             |
|               | 60   | 27   |   | 270  | 290   |   | 170                                | 110     | 0 15       |  | 60   | 108  | 915  | 5 240   | 3 20   | 0 690  |  | 5 114   |                |
|               | 90   | 27   |   | 275  | 26.0<br>1.8   |   |                                    |         | 10         |  | 8  | 102  | 980  | 245   | 215  | 670  | 400  | 115   | 44.4           |
|               | 07   | 232  |   | 275  | 270   |   |                                    |         | 19         | 75 ° 8                                 | 07   | 9.8  |  | 24.5  | 225  | 670  | 360  | 116   | 240            |
|               | 8  | 233  |   | 270  | 250   |   |                                    |         | 2.9        | S. 51                                  | 90   | 90   |  | 260   | 240  |  | 300  | 117   | 34             |
| 1 = 1         | 90   | 100  |   | 285  | 260   |   |                                    |         | 26         | 34.5                                   | 90   | 23   |  | 290   | 18   |  | 220  | 155   | 288            |
| 165.6N+ 22.1E |  | 24   |   | 310  | 250   |   | 270                                | 110     | 31         | BUENOS AIRES, ARGENTINA (34.55. 58.5%) | 04   | 21   |  | 405   | 215  |  |  |   | 30             |
| 5 . 6 N.      | 03   | 0 62<br>22<br>22   |   | 310  | 0.45  |   | 250 2                              |         | 3.2        | RGENT                                  | 603  | 22   |  | 370   | 220  |  |  |   | 36             |
| EN :6         | 8  | 02<br>20<br>20   |   | 340  | 2 6 72  |   |                                    |         | 31         | .s.                                    | 02   | 26   |  | 360   | 230  |  |  |   | 37             |
| SWEDEN        |  | 588 0  |   | 200 3  | 2 240 2   |   | 260                                |         | 31         | A I R                                  | 5  | 25 5 5   |  | 335   | 24.0   |  |  |   | 43             |
| LULEA,        | ō  |  |   |  |   |   | 26                                 |         | 35         | ENOS                                   |  | 25   |  | 380 3   | 230 2  |  |  |   | 100            |
| 3             | 00   | 288  | 0.00                                      | 004  | 240   |   | 0.5                                | 0.1-    |            | 0.0                                    | 8  |  | 05.00  |   |  | 0.5  | 0.5  | 0.5   |                |
|               |  | NO CNT   | CNT                                       | E S S M  | CNT   | MED   | MED                                | MED     | CNT        |  |  | CNT  | CNT  | CNT   | CNT  | CNT  | MED  | MED   | MED<br>CNT     |
|               | HOUR   |  |   |  | (M3000)F2   |   |                                    |         |            |  | HOUR   |  |  |   | (M3000) F2   |  |  |   |                |
|               |  | fo F2  | n.<br>F2                                  | Ē.   | (M30  | fo Fi   | fo E                               | <br>M   | to Es      |  | Ш  | 10 F.2   | h F2   | ī.  | ₩3C  | fo F.I   | \$<br>M  | ,e  | fo Es          |
|               |  |  |   |  |   |   |                                    |         |            |  |  |  |  |   |  |  |  |   |                |
| 3             |  |  |   |  |   |   |                                    |         |            |  |  |  |  |   |  |  |  |   |                |
| .0            | 53   | 202  |   | 27   |   |   |                                    |         |            | 0 0                                    | 23   | 35<br>28<br>27   |  | 28  | 22   |  |  |   |                |
| ME 75.0W      | 2 23   |  |   | 90 300<br>29 27  |   |   |                                    |         |            | IME 0.0                                | 2 23   | 27 135<br>28 28<br>43 155<br>23 127  |  | 15 320<br>28 28   | 27 22  |  | 640  | 4   |                |
| TIME 75.0     | 22   | 25.2   |   | 290  |   |   |                                    |         |            | TIME 0.0                               | 22   | 127<br>28<br>143<br>123  | 8  | 315   | 245  |  | U<br>0 140   |   |                |
| TIME 75.0     | 21 22  | 68 61<br>28 25   |   | 280 290<br>26 29   |   |   |                                    |         |            | TIME 0.0                               | 21 22  | 124 127<br>27 28<br>131 143<br>121 123   | 6 415<br>8 8   | 285 315<br>26 28  | 235 245 25 27  | 0 1  | 240  | 0 %   |                |
| TIME 75.0     | 22   | 70 68 61<br>28 28 25   |   | 290 280 290<br>30 26 29  |   |   |                                    |         |            | TIME 0.0                               | 20 21 22   | 125 124 127<br>29 27 28<br>132 131 143<br>116 121 123  | 440  | 250 285 315<br>26 26 28   | 230 235 245<br>28 25 27  | 740  | 330 240 23 12  | 13 190  |                |
| TIME 75.0     | 21 22  | 67 70 68 61<br>25 28 28 25   |   | 290 290 280 290<br>27 30 26 29   |   |   |                                    |         |            | 1.ME 0.0                               | 21 22  | 124 125 124 127<br>29 27 29<br>131 132 131 143<br>117 116 121 123  | 470 440 29 25  | 250 250 285 315<br>29 26 26 28  | 225 230 235 245<br>29 28 25 27   | 650  | 380 330 240<br>26 23 12  | 100 100 100<br>16 13 3  |                |
| TIME 75.0     | 20 21 22   | 70 68 61<br>28 28 25   |   | 290 280 290<br>30 26 29  |   |   |                                    |         |            | TIME 0.0                               | 20 21 22   | 125 124 127<br>29 27 28<br>132 131 143<br>116 121 123  | 440  | 250 285 315<br>26 26 28   | 230 235 245<br>28 25 27  |  | 330 240 23 12  | 13 190  |                |
| TIME 75.0     | 19 20 21 22  | 67 70 68 61<br>25 28 28 25   |   | 290 290 280 290<br>27 30 26 29   |   |   |                                    |         |            | 1 ME 0+0                               | 19 20 21 22  | 124 125 124 127<br>29 27 29<br>131 132 131 143<br>117 116 121 123  | 470 440 29 25  | 250 250 285 315<br>29 26 26 28  | 225 230 235 245<br>29 28 25 27   | 650  | 380 330 240<br>26 23 12  | 100 100 100<br>16 13 3  |                |
| TIME 75°C     | 18 19 20 21 22   | 26 25 28 28 25   |   | 300 290 290 290 290<br>28 27 30 26 29  |   |   |                                    |         |            | TIME 0.0                               | 18 19 20 21 22   | 123 124 125 124 127<br>29 29 27 28<br>131 131 132 131 143<br>119 117 116 121 123   | 490 470 440<br>29 29 25                                    | 250 250 250 285 315<br>29 29 26 26 28   | 220 225 230 235 245<br>29 29 28 25 27  | 670 650  | 450 420 380 330 240<br>25 27 26 23 12  | 23 16 13 3  |                |
| TIME 75.0     | 17 18 19 20 21 22  | 72 64 67 70 68 61<br>28 26 25 28 28 25   |   | 290 290 300 290 290 280 290<br>28 29 28 27 30 26 29  |   |   |                                    |         |            | TIME 0.0                               | 17 18 19 20 21 22  | 126 124 123 124 125 124 127 28 29 29 29 29 29 27 28 131 131 131 132 131 143 132 131 143 132 131 143  | 440 470 490 470 440<br>28 29 29 29 25                      | 250 250 250 250 265 315<br>28 29 29 29 26 26 26 28  | 235 225 220 225 230 235 245 29 29 29 29 29 29 29 29 29 29 29   | 720 680 670 650<br>24 26 25 19   | 460 450 420 380 330 240<br>23 25 27 26 23 12   | 100 100 100 100 100 100 100 23 21 23 16 13 3                    |                |
| TIME 75.0     | 15 16 17 18 19 20 21 22  | 82 72 64 67 70 68 61<br>24 28 26 25 28 28 25   |   | 290 290 290 300 290 290 280 290 290 290 290 290 290 290 290 290 29   |   |   |                                    |         |            | T.IME 0.0                              | 15 16 17 18 19 20 21 22  | 131 126 124 123 124 125 124 127 28 129 129 129 129 129 129 129 129 129 129   | 420 440 470 490 470 440<br>26 28 29 29 29 25               | 245 250 250 250 250 250 265 315<br>28 28 29 25 25 20 20 20 28   | 240 235 225 220 225 230 235 245 28 29 29 29 29 29 29 29 29 29 29 29 29 29  | 730 720 680 670 650<br>21 24 26 25 19  | 450 460 450 420 380 330 240<br>25 23 25 27 26 23 12  | 100 100 100 100 100 100 100 100 24 23 21 23 16 13 3             |                |
| TIME 75.0     | 14 15 16 17 18 19 20 21 22   | 82 76 82 72 64 67 70 68 61 25 26 25  |   | 280 290 290 290 300 290 290 280 290<br>25 29 28 29 28 27 30 20 29  |   |   | 90 1                               |         |            | 0*0 JME 0*0                            | 14 15 16 17 18 19 20 21 22   | 131 121 122 124 123 124 125 124 127 127 127 127 127 127 127 127 127 127  | 000 420 440 470 490 470 440<br>23 26 28 29 29 29 25        | 230 246 250 250 250 250 250 265 265 315 26 28 318   | 250 240 235 225 220 225 230 235 245<br>27 28 29 29 29 29 28 28 25 21   | 740 730 720 680 670 650 6 21 24 26 25 19   | 440 450 460 450 420 380 330 240<br>25 25 23 25 27 26 23 12                                       | 100 100 100 100 100 100 100 100 100 20 3 3 3 3 1 2 3 1 6 13 3 3 |                |
| TIME 75.0     | 13 14 15 16 17 18 19 20 21 22  | 83 82 76 82 72 64 67 70 68 63 23 24 26 26 28 28 28 28 29 25  |   | 280 280 290 290 290 300 290 290 280 290 30 28 29 28 27 30 28 29  |   |   | 0 180                              |         |            | TIME 0+0                               | 13 14 15 16 17 18 19 20 21 22  | 134 131 135 124 123 124 125 124 127 126 127 127 128 129 129 129 129 129 129 129 129 129 129  | 350 400 420 440 470 490 470 440<br>17 23 26 28 29 29 29 25 | 240 250 245 250 250 250 250 250 265 315<br>26 26 28 29 29 29 29 26 26 26 28   | 260 250 240 235 225 220 225 230 235 245<br>27 28 29 29 29 29 28 28 25 25 25  | 730 720 680 670 650<br>21 24 26 25 19  | 400 440 450 460 450 420 380 330 240<br>27 25 25 23 25 27 26 23 12                                | 100 100 100 100 100 100 100 100 100 100                         |                |
| TIME 75.0     | 14 15 16 17 18 19 20 21 22   | 88 83 82 76 82 72 64 67 70 68 63 24 25 28 28 28 29 25  |   | 280 280 290 290 290 290 300 290 290 280 290 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 290 280 280 280 280 280 280 280 280 280 28   |   |   | 180                                |         |            | 3M11                                   | 12 13 14 15 16 17 18 19 20 21 22                                     | 140 134 131 131 125 123 124 127 132 136 137 136 137 136 137 137 137 137 137 137 137 137 137 137  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 240 240 250 245 250 250 250 250 250 265 315<br>20 26 26 28 29 29 29 29 26 26 28 28  | 280 260 250 240 255 225 220 225 230 235 245 28 25 21   | 740 730 720 680 670 650 6 21 24 26 25 19   | 370 400 440 450 460 450 420 380 330 240<br>28 27 25 25 27 26 23 12                               | 100 100 100 100 100 100 100 100 100 100                         |                |
| TIME 75°C     | 13 14 15 16 17 18 19 20 21 22  | 72 08 83 62 76 62 72 64 67 70 68 61 25 28 28 28 29 29 29   |   | 290 280 280 280 290 290 290 290 290 290 290 280 290 310 28 29 28 29 28 27 30 28 29   |   |   | 180 180<br>18 12                   | 6       |            | 4.7 T.JME                              | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 138 140 134 131 131 126 124 123 124 125 124 127 28 129 129 129 139 139 139 139 139 139 139 139 139 13  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 250 040 240 250 245 250 250 250 250 250 250 255 250 255 250 250   | 295 280 260 250 240 235 225 220 225 230 235 245 245 26 28 25 24  | 740 730 720 680 670 650 6 21 24 26 25 19   | 310 370 400 440 450 460 450 420 380 330 240<br>26 28 27 25 25 23 25 27 26 23 12                  | 105 100 100 100 100 100 100 100 100 100                         |                |
| TIME 75°C     | 13 14 15 16 17 18 19 20 21 22  | 88 83 82 76 82 72 64 67 70 68 63 24 25 28 28 28 29 25  |   | 200 290 280 280 280 280 290 290 300 290 280 290 290 290 290 290 290 290 290 290 29   |   |   | 180 180 180<br>13 18 12            |         |            | 3M11                                   | 12 13 14 15 16 17 18 19 20 21 22                                     | 140 134 131 131 125 123 124 127 132 136 137 136 137 136 137 137 137 137 137 137 137 137 137 137  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 260 750 240 240 220 245 250 250 250 250 250 250 250 250 250 25  | 290 295 280 280 280 240 235 225 220 225 230 235 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 100 100 100 100 100 100 100 100 100 100                         |                |
| TIME 75°C     | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 72 08 83 62 76 62 72 64 67 70 68 61 25 28 28 28 29 29 29   |   | 290 280 280 280 290 290 290 290 290 290 290 280 290 310 28 29 28 29 28 27 30 28 29   |   |   | 180 180<br>18 12                   | n       |            | 4.7 T.JME                              | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 138 140 134 131 131 126 124 123 124 125 124 127 28 129 129 129 139 139 139 139 139 139 139 139 139 13  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 250 040 240 250 245 250 250 250 250 250 250 255 250 255 250 250   | 295 280 260 250 240 235 225 220 225 230 235 245 245 26 28 25 24  | 740 730 720 680 670 650 6 21 24 26 25 19   | 310 370 400 440 450 460 450 420 380 330 240<br>26 28 27 25 25 23 25 27 26 23 12                  | 105 100 100 100 100 100 100 100 100 100                         |                |
| TIME 75°C     | 10 11 12 13 14 15 16 17 18 19 20 21 22                               | 0-6 12 88 83 82 76 82 72 64 67 70 68 63 25 27 28 24 25 28 28 29 25   |   | 200 290 280 280 280 280 290 290 300 290 280 290 290 290 290 290 290 290 290 290 29   |   |   | 180 180 180<br>13 18 12            | 6       |            | 4.7 T.JME                              | 10 11 12 13 14 15 16 17 18 19 20 21 22                               | 104 138 140 134 131 131 135 124 123 124 125 136 136 136 136 136 136 136 136 136 136  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 260 750 240 240 220 245 250 250 250 250 250 250 250 250 250 25  | 290 295 280 280 280 240 235 225 220 225 230 235 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 09 10 11 12 13 14 15 16 17 18 19 20 21 22                            | 55 66 72 88 83 82 76 82 72 64 67 70 68 64 27 2 2 28 28 28 28 28 25   |   | 290 290 290 280 280 280 290 290 390 290 290 290 290 290 290 290 290 290 2  |   |   | 180 180 180 2 12 12 12             |         |            | 4.7 T.JME                              | 09 10 11 12 13 14 15 16 17 18 19 20 21 22                            | 73 104 138 140 134 131 131 182 182 183 184 185 184 185 184 185 184 185 185 185 185 185 185 185 185 185 185   | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 250 260 260 250 240 240 240 240 250 250 250 250 250 250 285 315 28 28 28 27 27 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28 | 275 265 260 295 260 260 250 2260 220 225 220 225 220 235 245 245 245 245 245 245 245 245 245 24  | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 48 65 66 72 88 83 82 76 82 72 64 67 70 68 63 2 7 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8   |   | 300 100 200 290 290 280 280 280 280 290 290 300 290 290 290 290 290 290 290 290 290 2  |   |   | 180 180 180<br>2 2 13 18 12        | 6       |            | TABLE 47 TIME                          | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 64 73 104 138 140 134 131 131 126 124 123 124 125 125 125 125 125 125 125 125 125 125  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 250 250 280 280 280 280 280 280 280 285 285 280 285 285 285 285 285 285 285 285 285 285                                     | 270 275 285 290 285 280 240 240 235 225 220 225 230 235 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 43 45 48 65 66 72 88 63 82 76 62 72 64 67 70 68 64 25 25 25 29 28 28 28 29 25  |   | 300 300 300 290 280 280 280 280 280 280 280 280 280 28   |   |   | 180 180 180<br>2 2 13 18 12        |         |            | TABLE 47 TIME                          | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 75 70 64 73 104 136 140 134 131 131 126 124 123 124 125 124 125 126 126 126 126 126 126 126 126 126 126  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 240 250 250 260 260 260 265 260 260 250 260 250 250 250 250 250 250 250 250 250 25  | 270 270 275 265 280 289 280 280 280 280 280 280 285 225 220 225 230 235 245 245 25 25 25 25 25 25 25 245 245 2   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 46 43 45 48 65 66 72 88 83 82 76 82 72 64 67 70 68 61 25 26 25 25 27 27 28 28 28 25 28 28 28 28 28 28 28 28 28 28 28 28 28                         |   | 320 350 360 300 290 290 290 290 280 280 280 290 290 290 290 290 290 290 290 290 29   |   |   | 180 180 180<br>2 2 13 18 12        | 0       |            | TABLE 47 TIME                          | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 88 75 70 64 73 104 138 140 134 131 128 124 123 124 125 125 124 125 124 125 125 124 125 125 125 124 125 125 125 125 125 125 125 125 125 125   | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 225 240 250 250 280 280 280 250 250 280 280 250 250 250 250 250 250 250 250 250 25  | 255 270 270 275 245 240 295 280 250 240 235 225 220 225 230 235 245 245 250 225 245 245 245 245 245 245 245 245 245  | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 47 46 43 45 46 65 66 72 88 83 82 76 82 72 64 67 70 68 63 22 24 26 26 28 28 28 28 28 28   |   | 310 320 300 300 100 280 280 280 280 280 280 280 280 290 280 390 280 280 280 280 280 280 280 280 280 28   |   |   | 1 2 2 13 180 120<br>1 2 2 13 18 12 |         |            | TABLE 47 TIME                          | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 108 88 75 70 644 73 104 138 140 134 131 131 126 124 123 124 125 124 127 128 128 128 128 128 128 128 128 128 128  | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 220 225 240, 250 250 240 260 250 240 240 230 245 250 250 250 250 250 250 250 250 250 25                                     | 265 775 270 270 270 275 285 280 280 280 280 280 280 285 285 285 282 28 28 28 28 28 28 28 28 28 28 28 28  | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 50 47 46 43 46 48 65 66 72 88 83 82 76 82 78 64 67 70 68 63 25 26 28 28 28 28 28 28 28 28 28 28 28 28 28   |   | 300 310 310 300 300 1300 280 280 280 280 280 280 280 280 280 2   |   |   | 1 2 2 13 180 120<br>1 2 2 13 18 12 |         |            | TABLE 47 TIME                          | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 136 108 08 75 70 64 73 104 138 140 134 131 131 126 124 123 124 125 125 125 125 125 125 125 125 125 125 | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 240 220 225 240 280 280 280 280 280 280 280 280 280 28  | 280 285 215 270 270 270 275 285 280 280 280 280 280 280 280 280 285 285 280 282 28 28 28 28 28 28 28 28 28 28 28 28  | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 47 46 43 45 46 65 66 72 88 83 82 76 82 72 64 67 70 68 63 22 24 26 26 28 28 28 28 28 28   |   | 300 300 310 320 300 300 300 290 290 280 280 280 280 280 280 290 290 290 290 290 290 290 290 290 29   |   |   | 1 2 2 13 180 120<br>1 2 2 13 18 12 |         |            | TABLE 47 TIME                          | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 150 136 109 89 75 70 64 73 104 138 140 134 131 126 124 123 124 125 124 125 124 127 124 124 124 124 124 124 124 124 124 124   | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 255 240 220 225 240, 250 250 250 250 250 250 250 250 250 250  | 275 280 285 275 270 270 270 275 285 280 285 280 280 280 280 280 285 225 220 235 235 245 245 245 245 245 245 245 245 245 24   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 50 47 46 43 46 48 65 66 72 88 83 82 76 82 78 64 67 70 68 63 25 26 28 28 28 28 28 28 28 28 28 28 28 28 28   |   | 300 310 310 300 300 1300 280 280 280 280 280 280 280 280 280 2   |   |   | 1 2 2 13 180 120<br>1 2 2 13 18 12 |         |            | TABLE 47 TIME                          | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 136 108 08 75 70 64 73 104 138 140 134 131 131 126 124 123 124 125 125 125 125 125 125 125 125 125 125 | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 240 220 225 240 280 280 280 280 280 280 280 280 280 28  | 280 285 215 270 270 270 275 285 280 280 280 280 280 280 280 280 285 285 280 282 28 28 28 28 28 28 28 28 28 28 28 28  | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22       | 50 50 47 46 43 45 48 65 66 72 88 83 82 76 82 72 64 67 70 68 64 28 28 28 28 28 28 28 28 28 28 28 28 28  |   | 300 300 310 320 300 300 300 290 290 280 280 280 280 280 280 290 290 290 290 290 290 290 290 290 29   |   |   | 1 2 2 13 180 120<br>1 2 2 13 18 12 |         |            | 4.7 T.JME                              | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22       | 150 136 109 89 75 70 64 73 104 138 140 134 131 126 124 123 124 125 124 125 124 127 124 124 124 124 124 124 124 124 124 124   | 310 350 400 420 440 470 440 77 7 17 23 26 28 29 29 29      | 255 240 220 225 240, 250 250 250 250 250 250 250 250 250 250  | 275 280 285 275 270 270 270 275 285 280 285 280 280 280 280 280 285 225 220 235 235 245 245 245 245 245 245 245 245 245 24   | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        |                |
| TIME          | 01 02 03 04 05 06 07 08 09 10 11 12 15 14 15 16 17 18 19 20 21 22    | 51 50 50 47 46 43 45 48 65 66 72 88 63 82 76 82 72 64 67 70 68 64 26 24 28 28 28 28 28 28 29 25 26 24 26 24 28 28 28 28 28 28 28 28 28 28 28 28 28 | 01<br>04<br>04<br>04                      | 20 300 300 310 310 320 300 300 300 290 280 280 280 280 280 280 280 280 280 28  | 01<br>00<br>00<br>00<br>00<br>00<br>00<br>00<br>00        | CAT<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN<br>GEN | 1 2 2 13 180 120<br>1 2 2 13 18 12 | C (ATT) | O SM       | TABLE 47 TIME                          | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 00 105 150 156 108 88 75 70 64 73 104 138 140 134 131 126 124 123 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 124 125 125 125 125 125 125 125 125 125 125  | 260 310 350 400 420 440 470 490 470 440 29 29 29 29 29     | 275 525 240 220 225 240 525 250 250 250 250 250 250 250 250 25  | 250 275 280 285 275 270 270 270 275 255 250 295 280 250 240 255 225 225 220 225 230 235 245 245 220 27 | 740 730 720 680 670 650 6 21 24 26 25 19   | 220 310 370 400 440 450 460 450 420 380 330 240 27 26 28 27 28 23 12                             | 05 105 100 100 100 100 100 100 100 100 1                        | METD<br>CAT    |
| TIME          | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 | 52 51 50 50 47 46 43 45 48 65 66 72 88 83 82 76 82 72 64 67 70 68 64 72 26 24 28 26 24 28 28 28 28 28 28 28 28 28 28 28 28 28                      | GW 00 00 00 00 00 00 00 00 00 00 00 00 00 | 300 300 300 310 310 310 320 300 300 230 230 230 230 230 280 280 280 290 290 290 290 280 280 280 280 280 280 280 280 280 28 | F2 MED CAY UP LO  | O DAY   | 1 1 2 2 180 180 180                |         | D IN O     | TABLE 47 TIME                          | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 | 14 155 150 136 108 08 75 70 64 73 104 138 140 134 131 126 124 123 124 125 124 125 124 127 128 129 129 129 129 129 129 129 129 129 129  | 260 310 350 400 420 440 470 490 470 440 29 29 29 29 29     | 300 275 285 240 220 225 240 250 240 250 250 280 250 250 250 250 250 250 250 250 250 25                                      | MED 240 250 275 380 285 775 270 270 270 275 28 28 27 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 70 740 720 680 670 650 770 720 680 670 650 770 720 680 670 650 770 770 770 770 770 770 770 770 770 7 | 140 220 310 370 460 450 460 450 460 450 480 330 240<br>14 27 26 28 27 25 25 25 29 25 27 26 28 12 | 10 10 10 100 100 100 100 100 100 100 10                         | MED<br>CWT     |
| TIME          | 01 02 03 04 05 06 07 08 09 10 11 12 15 14 15 16 17 18 19 20 21 22    | 52 51 50 50 47 46 43 45 48 65 66 72 88 83 82 76 82 72 64 67 70 68 64 72 26 24 28 26 24 28 28 28 28 28 28 28 28 28 28 28 28 28                      | h'F2 web                                  | 300 300 300 310 310 310 320 300 300 230 230 230 230 230 280 280 280 290 290 290 290 280 280 280 280 280 280 280 280 280 28 | (M3000)F2 WED CAY OUT | To FI MED   | 1 1 2 2 180 180 180                |         | IN ED CANT | TABLE 47 TIME                          | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 14 155 150 136 108 08 75 70 64 73 104 138 140 134 131 126 124 123 124 125 124 125 124 127 128 129 129 129 129 129 129 129 129 129 129  | 260 310 350 400 420 440 470 490 470 440 29 29 29 29 29     | 300 275 285 240 220 225 240 250 240 250 250 280 250 250 250 250 250 250 250 250 250 25                                      | 240 250 275 280 285 275 270 270 275 285 280 295 280 250 240 235 225 220 225 230 235 245 245 245 250 255 245 245 245 245 245 245 245 245 245  | 70 740 720 680 670 650 770 720 680 670 650 770 720 680 670 650 770 770 770 770 770 770 770 770 770 7 | 140 220 310 370 460 450 460 450 460 450 480 330 240<br>14 27 26 28 27 25 25 25 29 25 27 26 28 12 | 10 10 10 100 100 100 100 100 100 100 10                         | 10 ET MED CIVE |

|                |                   | MACQUARIE                              |                                  | I. (54.                            | (54.45. 159.0E                         | 59.0EI                          |                           |                   |                          |                          | A D L C                 | 1                              |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              | TIM                        | TIME 150.0E                           | 0E                                     |            |                  | CAPE  | CAPE HALLET (72.35. 170.3E             | T 172       | 2.35. | 170.             | 3E ) |                 |       |      |      | į     | 000   |  |         |       |            |                                       |        |        |        |                 |               | ±<br>E         | TIME 165.0E | 9e  |
|----------------|-------------------|--|----------------------------------|------------------------------------|--|---------------------------------|---------------------------|-------------------|--------------------------|--------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|---------------------------------|-------------------------------------|--|------------------|------------------------------------|---|----------------------------------|------------------------------|----------------------------|---------------------------------------|--|------------|------------------|-------|--|-------------|-------|------------------|------|-----------------|-------|------|------|-------|-------|--|---------|-------|------------|---------------------------------------|--------|--------|--------|-----------------|---------------|----------------|-------------|-----|
| HOUR           |                   | 8                                      | 0                                | 00 03                              | 3 04                                   | 8                               | 8                         | 07                | 08                       | 60                       | 0                       | Ξ                              | 12                      | 5                              | 14                              | 5                                   | 5 16                                   | 5                | 7                                  | 18                                      | 19 20                            | 20 2                         | 21 22                      | 22 23                                 |  | HOUR       |                  | 00    | ō                                      | 8           | 03    | 8                | 0.5  | 8               | 20    | 0.8  | 60   | 0     | =     | 2  | Đ       | 14    | ĕΣ         | 9 19                                  | 21 9   | 7 18   | 6)     | 9 50            | 2 21          | 23             | 53          |     |
| to F2          | MED<br>CNT<br>U00 | 525                                    | 48<br>115<br>50<br>41            | 2007                               | 50 52<br>15 18<br>52 56<br>48 49       | 2 58<br>8 20<br>6 60<br>9 53    | 91 98                     | 0 63<br>169<br>58 | 170                      | 169                      | 14 72 75                | 70 16 73 68                    | 199                     | 72 74 74 70                    | 2 72<br>8 17<br>0 75<br>0 70    |                                     | 22<br>22<br>22<br>27<br>27<br>27<br>27 | 74 77 76 70 70 6 | 71 7 7 7 7 4 7 7 6 6 6             | 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0000                             | 0 68 5<br>111 1<br>55 5      | 57 5<br>12 1<br>63 6       | 57 5<br>111 1<br>68 6                 | 52 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | fo F2      | MEO<br>CN↑<br>UO | 2 7 8 | 248                                    | 9 2 7       | 21    | 21               | 1,7  | 300             | 59    | 16   | 21   | 100   | 21    | 23                                       | 25      | 2 24  | 58         | 2 63                                  |        | 26 29  | 9 54   | 53              | 3 28          | 3 24           |             | 23  |
| h. F2          | MED<br>CNT<br>UD  |  |                                  | -                                  | rel                                    | 500                             | 590                       | 17                | 177                      | 15                       | 0 610                   | 15                             | 18                      | 170                            | 7 17                            |                                     | 22 500                                 | 19 19            | 13                                 | 530                                     |                                  | -                            |                            |                                       |  | h, F2      | MED<br>CNT<br>UQ | 066   | 075                                    | 625<br>5 55 | 10    | 13               | 110  | 580             | 20    | 13   | 18   | 170   | 15    | 625                                      | 620     | 2 24  | 610        | 570                                   | 25 26  | 55 525 | 5 505  | 7 19            | 9 15          | 495            | 5 530       | 0.4 |
| u<br>E         | CNTC              | 430 3                                  | 395 40                           | 17 1                               | 330 285                                | 260                             | 240                       | 230               | 225                      | 230                      | 230                     | 220                            | 220                     | 230                            | 8 17                            |                                     | 230 23                                 | 235 25 25 20 2   | 250 27                             | 275 32                                  | 320 34                           | 345 36                       | 365 37                     | 375 410<br>11 12                      |  | L.         | MED<br>CNT<br>UO | 300   | 300                                    | 275         | 270   | 255              | 250  | 240             | 240   | 230  | 24.0 | 230   | 220   | 215                                      | 210     | 220   | 225        | 23 23 23 23                           | 23 240 | 29 28  | 0 255  | 265             | 5 280<br>9 28 | 0 290          | 1           | 300 |
| (M3000) F2     | MED<br>CNT<br>UO  | 230 2<br>14<br>235 2<br>210 2          | 220 2<br>14 2<br>225 2<br>210 21 | 220 24<br>17 1<br>230 24<br>215 22 | 240 250<br>14 18<br>240 255<br>220 225 | 0 230<br>8 18<br>5 235<br>5 210 | 215<br>3 17<br>230<br>200 | 210               | 210<br>220<br>220<br>205 | 210<br>220<br>220<br>205 | 220<br>14<br>225<br>215 | 210<br>14<br>220<br>220<br>205 | 220<br>18<br>225<br>210 | 220<br>3 230<br>5 230<br>5 205 | 0 220<br>8 17<br>0 230<br>5 215 | 20 230<br>17 19<br>80 235<br>15 220 | 30 230<br>19 18<br>35 235<br>20 220    |                  | 240 23<br>15 1<br>245 24<br>215 22 | 230 23<br>14 1<br>245 25<br>220 21      | 235 23<br>11<br>250 24<br>215 22 | 230 24<br>7 245 24<br>225 22 | 240 23<br>245 24<br>225 21 | 230 220<br>7 10<br>240 230<br>210 210 |  | (M3000)F2  | MED<br>CNT<br>UO | 225   | 17                                     | 225         | 220   | 13               | 100  | 210             | 220   | 12   | 225  | 14    | 210   | 210                                      | 215     | 210   | 215        | 215 215                               | 15 220 | 20 225 | 25 220 | 230             | 0 235         | 230            |             | 18  |
| foFi           | MED               |  |                                  | -                                  | 1 400                                  | 0 4 60                          | 520                       | 520               | 530                      | 550                      | 560                     | 570                            | 560                     | 560                            | 7 17                            |                                     | 21 18                                  |                  | 111                                | ~                                       |                                  |                              |                            |                                       |  | to F.I     | CNT              | 340   | 350                                    | 370         | 390   | 410              | 430  | 4<br>2 8<br>2 8 | 480   | 490  | 500  | 500   | 500   | 2600                                     | 510     | 0 510 | 7 28       | 28 28                                 | 28 29  | 29 450 | 50 430 | 0 4 00<br>8 2 6 | 0 370         | 360            |             | 340 |
| fo E           | MED               |  |                                  | 20                                 | 205 260<br>12 17                       | 0 320                           | 360                       | 390               | 18                       | 400                      | 17                      | 410                            | 100                     | 0 400                          | 0 400                           | 00 385<br>17 20                     | 20 21                                  |                  | 330 26                             | 265 22                                  | 220                              | -                            |                            |                                       |  | fo E       | MED              | 240   | 240                                    | 250         | 270   | 280              | 300  | 330             | 350   | 370  | 370  | 380   | 370   | 370                                      | 370     | 360   | 360        | 22 22                                 | 50 330 | 23 27  | 27 24  | 280             | 0 260         | 7 25           | 1           | 230 |
| <u>ы</u><br>-с | MED               |  |                                  | 7 7                                | 11 17                                  | 0 100                           | 100                       | 100               | 100                      | 100                      | 100                     | 100                            | 100                     | 100                            | 0 100                           |                                     | 100 100                                | 21 10            | 100 10                             | 15 10                                   | 100                              |                              |                            |                                       |  | h' E       | MED              | 105   | 105                                    | 109         | 102   | 101              | 101  | 101             | 101   | 101  | 101  | 101   | 101   | 101                                      | 101     | 1 101 | 1 101 2 25 | 25 25                                 | 01 101 | 24 25  | 25 24  | 103             | 3 107         | 7 103          |             | 105 |
| fo Es          | MED               | 446                                    | 40 25                            | 34 2                               | 24 34                                  | E 32                            | 37                        | 39<br>19          | E +0                     | 6<br>16                  | E 40                    | £ 1 16                         | E 19                    | E 40                           | E 40                            | £ 38                                |  |                  | 8<br>34<br>20 2                    | 5 0 2                                   | 55 4                             | 20 2                         | 21 2                       | 20 2                                  | 250                                    | fo Es      | MED              | 3.1   | <u>=</u>                               | 3.1         | 31    | 3.1              | 3.1  | a i             | 31    | 31   | 31   | 3 1   | 30    | 30                                       | 30      | 4400  | 31         | 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 |        | 31 3   | 31. 3  | 31 31           | 1 31          | 1 31           |             | 31  |
|                |                   | ALERT. CANADA                          | CANAC                            |                                    | 182.0N. 6                              | 62.6WI                          |                           |                   |                          |                          | TABLE                   | LE 51                          |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              | Ī                          | T1ME 75.0W                            | 38.0                                   |            |                  | CLTDE | CLYDE, BAFFIN                          | H H         | 1. 17 | I. 170.5N. 68.5W | 68.6 | â               |       |      |      | TABLE | LE 52 | 2  |         |       |            |                                       |        |        |        |                 |               | H.             | W0.27 31    | 30  |
| MOUR           |                   | 00                                     | ō                                |                                    |  | 90                              | 90                        | 0.7               | 08                       | 8                        | 0                       | =                              | 12                      | 5                              | 14                              | 5                                   | 91                                     | 6 17             | 7 18                               |   | 19 20                            | 20 21                        | 21 23                      | 22 23                                 |  | HOUR       |                  | 00    | ō                                      | 05          | 0.3   | 0.4              | 02   | 90              | 0.7   | 88   | 60   | 0     | =     | 12                                       | 13      | 4     | 5          | 5 16                                  | 11 91  |        | 61 81  | 02 6            | 12 0          | 22             | 2 23        | [m] |
| foF2           | CNTC              | 0.04                                   | m .o                             |                                    |  | OL M                            |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     | 0.01                                   |                  | 22 2 2                             |   | 15 1                             |                              | 188                        | 60 6                                  |  | fo F.2     | CAT              | 262   | 2.00                                   | 25          | 2 2 2 | 23 23            | 23   | 18              | 200   | 24 5 | 21   | 23    | 78    | 22 8 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | 2 2 8 8 | 1 17  | 7 22       |                                       | 20 2   | 23 2   | 72 7   | 23 23           | 23 23         | 3 21           |             | 24  |
| ء' F           | CONT              |  |                                  |                                    |  |                                 |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       |  | h' F2      | DE OUT           |       |  |             |       |                  |      |                 |       |      |      |       |       |  |         |       |            |                                       |        |        |        |                 |               |                |             |     |
| LL.            | CONTO             | 310 3                                  | 310 32                           | 20 30                              | 300 300                                | 300                             | 300                       | 300               | 300                      | 300                      | 300                     | 300                            | 300                     | 300                            | 9 21                            |                                     | 300 300                                |                  | 21 2                               | 23 32                                   | 320 32                           | 320 32                       | 320 32<br>16 1             | 320 320<br>17 19                      |  | L.         | MED<br>CNT<br>UO | 300   | 300                                    | 300         | 300   | 320              | 290  | 300             | 280   | 290  | 290  | 290   | 290   | 3 00                                     | 280     | 0 290 | 0 290      |                                       | 26 2   | 300 30 | 300 30 | 300 280 27      | 10 300        | 7 27           |             | 300 |
| (M3000) F2     | MED<br>CNT<br>LQ  |  |                                  |                                    |  |                                 |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       | -                                      | (M3000) F2 | MED CNT          |       |  |             |       |                  |      |                 |       | 1    |      |       |       |  |         |       |            |                                       |        |        |        |                 |               |                |             |     |
| 10 F.I         | MED               |  |                                  |                                    |  |                                 |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       |  | fo F I     | CNT              |       |  |             |       |                  |      |                 |       |      |      |       |       |  |         |       |            |                                       |        |        |        |                 |               |                |             |     |
| 10 E           | CNE               |  |                                  |                                    |  | 2                               | 1                         | 2                 |                          |                          | 2                       |                                | 2                       |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       |  | fo E       | MED              |       |  |             |       |                  |      |                 | -     | 170  | 180  | 190   | 200   | 200                                      | 200     | 2 18  | 0<br>8 15  | - 5                                   |        |        |        |                 |               |                |             |     |
| ъ.<br>П        | MED               |  |                                  |                                    |  |                                 |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       |  | P.E        | MED              |       |  |             |       |                  |      |                 |       |      |      | 3     | 2     | 2  |         | 2     |            |                                       |        |        |        |                 |               |                |             |     |
| foEs           | MED               |  |                                  |                                    |  |                                 |                           |                   |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  |                              |                            |                                       |  | to Es      | MED              |       |  |             |       |                  |      |                 |       |      |      |       |       |  |         |       |            |                                       |        |        |        |                 |               |                |             |     |
|                |                   | SWEEP 1.6 MC TO 20.0 MC IN 15 SECONOS. | 1 .6 M                           | C TO 2                             | 0 * 0 M                                | IN I                            | 5 SECI                    | ONOS.             |                          |                          |                         |                                |                         |                                |                                 |                                     |  |                  |                                    |   |                                  | Z                            | DVEMBE                     | NOVEMBER. 1957                        | 57                                     |            |                  | SWEER | SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS. | ₩.          | .0 20 | O MC             | N I  | 5 SEC           | ONDS. |      |      |       |       |  |         |       |            |                                       |        |        |        |                 | S.            | NOVEMBER: 1957 | IR.         | 13  |

TABLE 50

TABLE 49

| 14                                |  |                              |   |                    |                    |           |          | ,       | ,     |                              |          |                  |                  |                 |                     |        |          |          |       |
|-----------------------------------|--|------------------------------|---|--------------------|--------------------|-----------|----------|---------|-------|------------------------------|----------|------------------|------------------|-----------------|---------------------|--------|----------|----------|-------|
|                                   | 0 · 0 ·                                | 120                          |   | 360                | 235                |           |          |         | 16    | TIME 75.0W                   | 23       | 16               |                  | 300             |                     |        |          |          |       |
|                                   | TIME 60.0M                             | 22<br>120<br>26              |   | 370                | 225                |           |          |         | 16    | ¥ .                          | 22       | 22               |                  | 300             |                     |        |          |          |       |
|                                   |  | 122                          |   | 385                | 220                |           |          |         | 1 6 1 | -                            | ~        | 20               |                  | 300             |                     |        |          |          |       |
|                                   |  | 20 2<br>123 1<br>26 1        |   | 380                | 220 2              |           |          |         | 18    |                              | 2        | 51               |                  | 300 3           |                     |        |          |          |       |
|                                   | ŀ                                      | 127 1                        |   | 350 3              | 230 2 20 2         |           |          |         | 23    |                              | 6        | 500              |                  | 300 3           |                     |        |          |          |       |
|                                   |  |                              | 7                                       | 290 3              | 240 2              |           | 230      | 139     | 32    |                              | 0        | 20               |                  | 300 3           |                     |        | ļ        |          |       |
|                                   |  |                              |   |                    |                    |           | 290 2    |         | 2.9   |                              |          | 22               |                  |                 |                     |        | 7        |          |       |
|                                   |  | 120                          | 24<br>00<br>00<br>00                    | 260                | 235                | 0.0       |          | 9 119   |       |                              | -        |                  |                  | 300             |                     |        | 4        |          |       |
|                                   |  | 120 29                       | 430                                     | 250                | 235                | 9 6 6     | 360      | 119     | 294   |                              | 9        | 20               |                  | 300             |                     |        |          |          |       |
|                                   |  | 129                          | 290                                     | 245                | 235                | 670       | 0 4      | 117     | 29    |                              | 5        | 76               |                  | 290             |                     |        | D # 0    | ~        |       |
|                                   |  | 132                          | 450                                     | 250                | 235                | 700       | 4 20     | 115     | 29    |                              | 4        | 20               |                  | 290             |                     |        | 190      | т.       |       |
|                                   |  | 132                          | 460                                     | 235                | 230                | 0.80      | 420      | 119     | E 42  |                              | Ē        | 8 2 4 2 4        |                  | 290             |                     |        | 190      | 240      |       |
|                                   | -                                      | 132                          | 26                                      | 240                | 235                | 720<br>17 | 430      | 100     | 50    |                              | 2        | 23               |                  | 290             |                     |        | 190      | 140      |       |
| 4.5                               | Ī                                      | 133                          | 465                                     | 240                | 235                | 730       | 430      | 33      | E 43  | 20                           | Ξ        | 24               |                  | 300             |                     |        | 200      | 9        |       |
| TABLE                             |  | 128                          | 17                                      | 230                | 230                | 720       | 420      | 111     | E 42  | TABLE                        | 9        | 23               |                  | 300             |                     |        | 200      | 150      |       |
|                                   |  | 121 29                       | 285                                     | 230                | 230                | 740       | 007      | 111     | 5.0   |                              | 60       | 2 2 2            |                  | 290             |                     |        | 190      | - 4      |       |
|                                   | - 1                                    | 27                           | 390 4                                   | 235 2              | 225 2              | 2 2 2     | 380 4    | 111     | 44    |                              | 8        | 54 66            |                  | 290 5           |                     |        | 190      | 130      |       |
|                                   | - 1                                    | 26 1                         | -                                       | 240 2              | 235 2              | 1 - 0     | 340      | 113     | 0.0   |                              | 07       | 56               |                  | 290 2           |                     |        | 180      | 7        |       |
|                                   | 58.5                                   | 98 24 2                      |   | 250 22             | 265 2              |           | 290 3    | 119 1   | 34    |                              | 0 90     | 54               |                  | 290 2           |                     |        | 180      |          |       |
|                                   | .55.                                   |                              |   | 280 25             |                    |           | 210 29   | 161 11  | 33    | =                            |          | 25 2             |                  | 300 29          |                     |        | 24 6     |          |       |
|                                   | A 134                                  |                              |   |                    | 0 215              |           | 4 21     | 100     |       | 62.6W                        | 0.5      |                  |                  |                 |                     |        | _        |          |       |
|                                   | NTIN                                   | 8 282                        |   | 350                | 220                |           | u -      | - N     | 3 22  | o No                         | 0.0      | 5 22             |                  | 900             |                     |        | -        |          |       |
|                                   | ARGE                                   | 91                           |   | 290                | 235                |           | ļ _      | E 2     | 1 39  | (82                          | 03       | 25               |                  | 300             |                     |        |          |          |       |
|                                   | 1865.                                  | 8 85                         |   | 300                | 245                |           | <u> </u> | a -     | 244   | ANAOA                        | 05       | 212              |                  | 310             |                     |        |          |          |       |
|                                   | BUENOS AIRES. ARGENTINA 134,55. 58.5W) | 7,88                         |   | 325                | 255                |           |          |         | 24    | ALERI, CANADA (82.6N. 62.6W) | õ        | 20               |                  | 300             |                     |        |          |          |       |
|                                   | BUEA                                   | 00 118                       |   | 350                | 240                |           |          |         | 34    | ALER                         | 8        | 62<br>16         |                  | 300             |                     |        |          |          |       |
|                                   |  | MECONT                       | S C C C C C C C C C C C C C C C C C C C | CNT                | 2 MEG<br>CNT<br>UD | MEO       | MED      | MED     | MEG   |                              | ( c      | MEG<br>CNT<br>UD | MED<br>CNT<br>UD | MED<br>CNT      | 2 MED<br>CNT<br>UG  | MEG    | MED      | MED      | MED   |
|                                   |  | to F2                        | h' F2                                   | ш.<br>- <u>-</u> - | (M 3000)F2         | F         | Fo E     | ш<br>*c | fo Es |                              | HOUR     | fo F 2           | - F2             | E.              | (M3000)F2           | 19 6 F | \$<br>FI | Ē        | fo Es |
| 0 • 0                             |  | 23<br>153<br>163<br>163      | 56                                      | 320                | 240                |           |          |         |       | 3 · O w                      | 23       |                  |                  | 315             | 245                 | 990    | 1 t      | 15       | _ :   |
| TIME 0.0                          |  | 22<br>142<br>26<br>148       |   | 310                | 250 250 26         |           |          |         |       | TIME 60.0W                   | 22       |                  | -                | 305             | 260 2               | 920 9  | 21       | =        |       |
| -                                 | - 1                                    | 21 2<br>138 1<br>25<br>140 1 |   | 290 3              | 240 2              |           | 230      | 125     |       | F=                           | =        |                  | ~                | 300 3           | 260 2               | 920 9  | 1 E      | 1        |       |
|                                   |  | 20 2<br>133 1<br>142 1       |   | 250 22             | 235 24             | 690       | 320 2    | 100 17  |       |                              | 20 2     | 90               |                  | 290 30          | 275 26 26 2         | 910 92 | E 6      | 4        | w ?   |
|                                   | -                                      | 19 2<br>132 1<br>25<br>138 1 |   | 250 22             | 230 2.             | 200 6     | 370 3.   | 100 TC  |       |                              | H        | 9 0 0 1          |                  |                 | 280 2               | 900 91 | w        | <b>3</b> |       |
|                                   |  |                              |   |                    |                    |           |          |         |       |                              | 6        |                  | v 4              | E 270           |                     |        | 0.4      | 101      |       |
|                                   |  | 134 134 139 139 139          |   | 240                | 230                | 730       | 400      | 21 21   |       |                              | 0        | 20               | 365              | 245             | 280                 | 900    |          | 101      |       |
|                                   |  | 139                          |   | 235                | 235                | 740       | 1,20     | 105     |       |                              | 17       | 25               | 400              | 230             | 275                 | 810    |          | 100      | 1     |
|                                   | -                                      | 142<br>25<br>146             |   | 230                | 245                | 780       | 450      | 105     |       |                              | 9        | 29               | 410              | 220             | 270                 | 009    |          | 101      | 2     |
|                                   |  | 148                          |   | 230                | 245                | 820       | 460      | 110     |       |                              | 5        | 2.5              | 480              | 220             | 265                 | 620    | 370      | 101      |       |
|                                   |  | 4 4 4 4 4 8 4 4 4 8          |   | 230                | 260                | 049       | 440      | 105     |       |                              | 4        | 25               | 11               | 220<br>21<br>21 | 260                 | 010    |          |          |       |
|                                   |  | 148<br>27<br>27<br>153       | 355                                     | 225                | 275                | 950       | 420      | 100     |       |                              | 5        | 28               | 100              | 210<br>22       | 260                 | 620    | 380      | 101      | 2     |
|                                   |  | 15.3<br>2.8<br>16.0          | 146                                     | 240                | 295                |           | 380      | 100     |       |                              | 2        | 24               | 1 8              | 220<br>22       | 250                 | 620    |          |          |       |
| 53                                |  | 12 28 15 1                   | 250                                     | 250                | 295                |           | 320      | 100     |       | 0                            | =        | 24               | 15               | 210             | 260                 | 610    | 365      | 0 7 0 0  | -     |
| TABLE                             |  | 10<br>112<br>27<br>122       |   | 260                | 290                |           | 240      | 145     |       | ABLE                         | 0        | 34               | 440              | 220<br>19       | 250                 | 610    | 375      | 66       | ~     |
|                                   |  | 25 256                       |   | 255                | 280 25             |           | 220      | -       |       |                              | 8        | 21               | 450 4            | 220 2           | 18                  | 90 06  | 380 3    | 101      | 3.5   |
|                                   |  | 08<br>54<br>26<br>82<br>82   |   | 260 2              | 275 2              |           | 200      | ~       |       |                              | 0.80     | 56               | 160 4            | 220 2<br>22 2   | 250 2               | 540 5  | 345 3    | 99 1     | 17.0  |
|                                   | - 1                                    | 07 09 26 26 78               |   | 240 22             | 275 2              | -         |          |         |       |                              | $\vdash$ | 28 10            | 200              | 220 22          | 240 25              | 510 54 | 325 34   | 101      | 040   |
|                                   | 1                                      |                              |   | 225 24             | 280 27             |           |          |         |       |                              | 5 07     | 2 4 2            |                  |                 |                     |        |          |          | 4,0   |
| PARAMARIBO. SURINAM (5.8N. 55.2M) |  | -                            |   |                    |                    |           |          |         |       |                              | 90       |                  | 6 440            | 5 230           | 8 245               | 0 470  | 0 290    | 1 101 7  |       |
| . 8<br>                           |  | 8 97                         |   | 0 220              | 3 24               |           |          |         |       | 78.7                         | 0.5      | 246              | 410              | E 265           | 5 248               | 9 450  | 250      | 7 101    |       |
| £                                 |  | 1118                         |   | 220                | 280                |           |          |         |       | 5. 60                        | 0.4      | 16               | 4 2 0            | 290             | 245                 | 790    | 210      | 0 -      | å     |
| JRINA                             |  | 161<br>27<br>27<br>175       |   | 225                | 280                |           |          |         |       | DECEPCION 1. 163.05. 60.7W   | 03       | 0 64             | 4 20             | 320             | 250                 | 960    | E 15     | 19       | m ,   |
| 0. 5(                             |  | 2 27 180                     |   | 250                | 270                |           |          |         |       | -                            | 20       |                  |                  | 310             | 248                 | 990    | E 20     | 21       | , E   |
| 4 A B I B                         |  | 171<br>26<br>180             | 120                                     | 260                | 270                |           |          |         |       | 3C10N                        | 0        |                  |                  | 305             | 260                 | 999    | 1 8 E    | . 6      | m     |
| PARA                              |  | 0 170                        | _                                       | 300                | 250                |           |          |         |       | DECE                         | 00       | 0-00             | 0-+0             | 320             | 248<br>T 24         | 999    | 81 E     | 18       | _ E   |
|                                   |  | MEO<br>CNT<br>UD             | MAED<br>CNT                             | MED                | CNT<br>CNT<br>UQ   | MEO       | MED      | MEO     | MEO   |                              | ŭ.       | CONT             | MEO<br>CNT<br>UD | CNTC            | F2 ME0<br>CNT<br>UD | MED    | MED      | MED      | MEO   |
|                                   |  | AUOH                         | F2                                      |                    | (M3000) F2         | 1         |          |         |       |                              | HOUR     |                  |                  |                 | (M3000) F2          |        |          |          |       |

| 0           |  | 78  |        | 288   | 235                                   |   |   |  | 22                                      |  | 23   | 170  |   | 280   |  |  |   |   | 2.5   | 957                                  |
|-------------|--|---|--------|---|---------------------------------------|---|---|--|---|--|--|--|---|---|--|--|---|---|---|--------------------------------------|
| TIME 0.0    | 2 23   |   |        | 270 28  | 230 23                                |   |   |  | 30                                      |  | 22 23  | 174  |   | 312 2   |  |  |   |   | 31 E  | OCTOBER: 1957                        |
| F           | 23   | 2 29  |        |   | 1                                     |   |   |  | 30 2                                    | * U  | - 1 1  | 5-1  |   | 350 3   |  |  |   |   | 30  | CTOBI                                |
|             | 12   | 30  |        | 270   | 2,48                                  |   |   |  |   |  | 21   |  |   |   |  |  | -   |   |   | 0                                    |
|             | 20   | D<br>84<br>29   |        | 250   | 250                                   |   |   |  | 30                                      |  | 50   |  |   | 380   |  |  | ш   | w   | 7 7 7 8   |                                      |
|             | 6  | 0<br>86<br>30   |        | 30  |                                       |   |   |  | 30                                      |  | 61   |  |   | E 425   |  |  | m _   | ш   | 13  |                                      |
|             | œ  | 0<br>0<br>2<br>2<br>9   |        | 250   |                                       |   | 2.4<br>2.4  | E 24   | 30                                      |  | 9  |  |   | 325   |  |  | 172   |   | 4.8   |                                      |
|             | -  | 125   |        | 250   |                                       |   | 190   | . 6.   | 26                                      |  | -  |  |   | 31  |  |  | 260   | 115   | 30  |                                      |
|             | 9  | 127   | 270    | 250   |                                       |   | 260   | 120  | 30                                      |  | 9  |  | 0 4   | 230   |  |  | 330   | 105   | 2 4 B   |                                      |
|             | ū  | 131 28  | 300    | 250   | 260                                   | 009                                     | 328   | 110  | 33                                      |  | 10   |  | 455   | 220   |  |  | 370   | 100   | 36  |                                      |
|             | 4  | 132   | 298    | 235   | 260                                   | 630                                     | 360   | 105  | 31                                      |  | 4  | 154  | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5   | 210   |  |  | 700   | 23  | 27  |                                      |
|             | 5  | 28 28   | 328    | 230   | 265                                   | 750                                     | 370   | 100  | 2.92                                    |  | 150  | 160  | 4 15  | 200   |  |  | 1.6   | 100   | 23  |                                      |
|             | 2  | 28 28   | 300    | 230 2   | 270 2                                 | 099                                     | 380 3   | 100  | 0.8                                     |  | 2  | 162  | 0.4   | 200   | 222  |  | 430   | 20  | 22  |                                      |
| 88          | =  | 135 1   | 285    | 230 2   | 278 2                                 | 009                                     | 370 3   | 105 1  | 38                                      | 0  | =  | 165  | 24  | 2002  | 242  |  | 425   | 200   | 02  |                                      |
| TABLE       | 0  | 134 1   | 300 2  | 230 2 28  | 288 2                                 | 9 084                                   | 360 3   | 100 1  | 38                                      | TABLE  | ē  | 100 1  | 34  | 205 2   | 260 2  |  | 450 4   | 23  | 27  |                                      |
| 4           | H  |   |        | 230 23  | 1                                     | 0.00                                    | 335 3   | 108 10   | 36                                      | Ĕ  | 60   | 1155 11  |   | 210 2   | 285 2  |  | 395 4   | 25 1  | 4.8   |                                      |
|             | 60   | 2 130   | 305    |   | 5 295                                 |   |   |  |   |  |  |  |   |   |  |  |   | 105 10  | 50  |                                      |
|             | 80   | 132   | 260    | 230   | 295                                   | 010                                     | 300   | 5 110  | 5 29                                    |  | 8  | 154  |   | 220   | 3000   |  | 5 350   |   | 27 2  |                                      |
|             | -07  | 103   |        | 245   | 280                                   |   | 228   | 115  | 25                                      | a<br>al  | 70.48  | 118  |   | 5 230   | 3 310  |  | 2 275   | 110   | 35 4  | INUTE                                |
| â           | 8  | 27  |        | 260   | 270                                   |   | 175   | 12   | 2.7                                     |  | 8N. 1  | 18   |   | 245   | 295  |  | 162   | m<br>w  |   | 2E                                   |
| 0.3E)       | 05   | 58  | 370    | 260<br>260<br>26  | 18                                    | 190                                     | ш   | ш  | E 27                                    | z  | 05   | 170  |   | 220   | 310  |  | ω   | ш   | 212   | M.                                   |
| 1 46 a 6N a | 8  | 2.8   |        | 285<br>295  | 12                                    |   |   |  | 29                                      | ¥  | FRICA<br>04  | 06   |   | 220   | 582  |  | ш   | E   | E 25  | TO 20.0 MC IM 10 MINUTES.            |
|             | 03   | 300   |        | 320<br>29   | 248                                   |   |   |  | 30                                      | 0  | W. A   | 06<br>0  |   | 220   | 288  |  | w   | w ~   | E 24  |                                      |
| FRANCE      | 8  | 2 9 8   |        | 315   | 2 4 5                                 |   |   |  | E 29                                    | Ĭ  | OAKAR. FRENCH W. AFRICA (14.8N. 17.4W)   | 110  |   | 218   | 275  |  | w ~   | w   | E 28  | SWEEP 1.25 MC                        |
| POITIERS.   | ō  | 7.2   |        | 3 10<br>2 2 9   | 232                                   |   |   |  | 22                                      | 9  | 9 0  | 2 2 2  |   | 230   |  |  |   |   | E 28  |                                      |
| T109        | 00   | 30  |        | 315   | 235                                   |   |   |  | 30                                      | a.<br>Lu<br>B  | 00 OO  | 175  |   | 30  | _  |  |   |   | E 27  | SWE                                  |
|             |  | MED<br>CNT  | CN S C | SNT   | CNE                                   | CNT                                     | MED   | MED  | CNT                                     |  |  | CONT   | CNT   | CNT   | MED  | MED                                      | CNT   | MED   | Ø E D   |                                      |
|             | HOUR   |   |        |   | (M 3000)F2                            |   |   |  |   |  | HOUR   |  |   |   | (M 3000) F2  |  |   |   |   |                                      |
|             |  | fo F2   | h. F2  | -E  | IM 30                                 | fo F.I                                  | ا<br>م  | -c   | to E                                    |  |  | 10 F 2   | h'F2  | -E  | (M 3C  | \$<br>E                                  | 5<br>E  | .е<br>П   | fo Es   |                                      |
|             |  |   |        |   |                                       |   |   |  |   |  |  |  |   |   |  |  |   |   |   |                                      |
| MO * 5.     | 23   | 30  |        | 0.0   | 1                                     |   |   | T  |   |  | _  |  |   |   |  |  |   |   | 26  | 1957                                 |
| Pro         | 1 1  |   |        | 300   |                                       |   |   |  |   |  | 23   | 2002   |   | 290<br>290<br>28  | 100  |  |   |   | , ~   | -                                    |
| ×           | 22   | 27  |        | 290 300   |                                       |   |   |  |   |  |  |  |   |   |  |  |   | q   | 28 2  | BER: 19                              |
| TIME 75.0W  |  | 71 68   |        | 290   |                                       |   |   |  |   | E STATE OF THE STA | 21 22 23   | 93   |   | 2 40<br>2 8<br>2 8  | 260  |  |   | Q.  | ′ I   | OCTOBER, 19                          |
| TIME        | 22   |   |        | 290 290 29  |                                       |   |   |  |   | C G G MI   | 21 22  | 23 20  |   | 285 290<br>28 28  | 265 260  |  |   | 9   | 21 28   | OCTOBER, 19                          |
| TIME        | 21 22  | 71  |        | 290 290 290 290 29  |                                       |   |   |  |   | C.C. MILT  | 22   | U 0<br>107 95 93<br>24 23 20   |   | E E E 285 290 28 28   | 260 265 260<br>15 10 9   |  |   | o,  | 20 21 27 28   | OCTOBER, 19                          |
| TIME        | 19 20 21 22  | 70 71 29 27   |        | 290 290 290 290<br>30 28 29 29  |                                       |   |   |  |   | CAC PAILY  | 19 20 21 22  | 0 0 0<br>108 107 95 93<br>22 24 23 20  | 16  | E E E E E 285 290 28 28 28 28   | 260 260 265 260<br>13 15 10 9  |  | 3   | -17<br>-00  | 26 26 27 28   | OCTOBER: 19                          |
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| TIME        | 17 18 19 20 21 22  | 79 70 72 70 71<br>29 29 29 29 27  |        | 290 290 290 290 290<br>29 29 30 28 29 29  |                                       |   | 00 180<br>16 5  | 50   |   | G G JRELL  | 17 18 19 20 21 22  | 127 121 108 107 95 93<br>25 23 22 24 23 20   | 0<br>252 260<br>2 16  | 255 262 265 285 285 290<br>27 28 28 28 28 28  | 255 260 260 260 265 260<br>24 16 13 15 10 9  |  | 265   | 120<br>19   | 35 32 31 20 21 27 28 27 28  | OCTOBER, 19                          |
| TIME        | 16 17 18 19 20 21 22   | 94 79 70 72 70 71<br>28 29 29 29 29 27  |        | 280 290 290 290 290 290 290 290 290 29 28 29 29 29  |                                       |   | 200   | 0 120  |   | C O SP(1)  | 1 ME 15 20 21 22   | 130 127 121 106 107 95 93<br>25 25 23 22 24 23 20  | 252   | 250 255 262 265 265 285 290<br>25 27 28 28 28 28 28   | 250 255 260 260 260 265 260 24 24 16 13 15 10 9  | 0  | 320 265<br>22 20  | 112 120<br>22 19  | 38 35 32 31 20 21<br>25 27 24 26 20 27 28   | OCTOBER, 19                          |
| TIME        | 15 16 17 18 19 20 21 22  | 87 84 79 70 72 70 71<br>27 28 29 29 29 29 27  | 7      | 280 280 290 290 290 290 290 290 290 290 280 280 29 29 30 28 29 29 29                                      |                                       | 2                                       | 220 200<br>22 16  | 120  |   | G G SWILL  | 15 16 17 18 19 20 21 22  | 131 130 127 121 108 107 95 93 20 24 23 20  | 305 252<br>1 252  | 250 250 255 262 265 265 285 290 260 250 250 250 260 260 260 260 260 260 260 260 260 26                                    | 245 250 255 260 260 260 265 260 260 265 260 26 260 26 260 26 260 26 260 26 260 26 260 26 260 26 260 26 26 26 26 26 26 26 26 26 26 26 26 26   | 0 620<br>5 61                            | 370 320 265 E   | 110 112 120 E   | 38 38 35 32 31 20 21<br>26 25 27 24 26 26 27 28   | OCTOBER, 19                          |
| TIME        | 14 15 16 17 18 19 20 21 22   | 81 87 29 29 29 29 27 71 28 27 27 27 27 27 27 27 27 27 27 27 27 27   | ~      | 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       |   | 230 220 200 230 23 22 16  | 110 120  |   | 50 SHILL   | 11 ME 15 16 17 18 19 20 21 22  | 133 131 130 127 121 108 107 95 93<br>23 26 25 25 23 22 24 23 20  | 370 305 252<br>35 1 252   | 250 250 250 255 262 265 265 265 270 25 265 270 28 28 28 28 28 28 28 28 28 28 28 28 28                                     | 250 245 250 255 260 260 260 265 260 265 260 20 20 20 20 20 20 20 20 20 20 20 20 20   | 750                                      | 400 370 320 265 E   | 105 110 112 120 E   | 35 38 38 35 32 31 20 21<br>24 26 25 27 24 26 26 27 28   | OCTOBER, 19                          |
| TIME        | 13 14 15 16 17 18 19 20 21 22  | 92 81 97 84 79 70 72 70 71 71 71 71 71 71 71 71 71 71 71 71 71  | 2      | 260 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       |   | 260 230 220 200<br>23 23 22 16  | 110 110 120  |   | STATE OF STA | 13 14 15 16 17 18 19 20 21 22  | 136 133 131 130 127 121 108 107 95 93 22 22 23 26 25 25 25 22 22 24 23 20  | 365 370 U U 252<br>3 5 1 252  | E 250 250 250 250 255 262 265 265 285 295 20 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | 250 250 245 250 255 260 260 260 265 260 260 15 15 10 9   | 0<br>660 750<br>2 5                      | 390 400 370 320 265 E   | 110 105 110 112 120 E   | 40 35 38 38 35 32 31 20 21 25 24 26 26 27 28  | OCT08ER, 19                          |
|             | 14 15 16 17 18 19 20 21 22   | 78 82 81 87 84 79 70 72 70 71 28 29 29 29 29 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29  | 2 2    | 270 260 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       | 4                                       | 270 260 230 220 200<br>23 23 23 22 16   | 105 110 110 120<br>19 19 13 10                                 |   | en i i   | 11 ME 15 16 17 18 19 20 21 22  | 134 136 133 131 130 127 121 108 107 95 93 23 24 23 26 25 25 25 22 24 23 20   | 360 365 370 305 252<br>5 3 5 1 2  | E E E E E E E E E E E E E E E E E E E   | 250 250 250 245 250 255 260 260 260 260 200 200 200 200 200 200  | 750                                      | 380 390 400 370 320 265<br>11 11 12 17 22 20                                    | 105 110 105 110 112 120 E   | 41 40 35 38 38 35 32 31 20 21<br>23 25 24 26 25 27 24 26 26 27 28   | OCT08ER, 19                          |
| 57          | 13 14 15 16 17 18 19 20 21 22  | 26 78 82 81 97 94 79 70 72 70 71 28 29 29 29 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29   | 2 2 2  | 270 270 260 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       | 044                                     | 280 270 260 230 220 200<br>23 23 23 23 22 16                                      | 105 105 110 110 120<br>21 19 19 13 10                          |   | on I.  | 13 14 15 16 17 18 19 20 21 22  | 136 134 136 133 131 130 127 121 106 107 95 93<br>24 23 26 25 25 23 22 24 23 20   | 230 360 365 370 305 252 1 252   | 210 245 250 250 250 255 262 285 285 285 285 289 289 289 289 289 289 289 289 289 289                                       | 265 250 250 250 245 250 255 260 260 260 265 260 260 260 260 260 260 260 260 260 260  | 0 0 0<br>680 660 750<br>2 2 5            | 380 380 390 400 370 320 265<br>12 11 11 12 17 22 20                             | 105 105 110 105 110 112 120 E   | 20 23 25 24 20 25 27 24 26 20 27 28 20 21 28 20 21 28 20 21 29 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 20 20 20 20 20 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20 | OCTOBER, 19                          |
|             | 12 13 14 15 16 17 18 19 20 21 22                                     | 80 78 82 81 67 84 79 70 72 70 71 10 71 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2  | 2 2    | 280 270 270 260 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       | U U U 0460 465 3 4                      | 270 280 270 260 230 220 200<br>20 23 23 23 23 22 16                               | 100 105 105 110 110 120<br>11 21 19 19 13 10                   |   | en i i   | 1 1 13 14 15 16 17 18 19 20 21 22  | 130 134 130 133 131 130 127 121 108 107 95 93  | 245 20 36 36 370 0 252<br>5 21 35 35 370 5 5 2  | 230 230 245 250 250 250 250 255 262 265 265 265 275 27 28 28 28 28 28 28 28 28 28 28 28 28 28                             | 280 285 250 250 250 245 250 255 260 260 260 265 260 269 15 10 19 17 20 15 20 25 24 16 13 15 10 9   | 0 0 0 450 450 660 750                    | 380 390 400 370 320 265<br>11 11 12 17 22 20                                    | 105 105 110 105 110 112 120 E   | 41 40 35 38 38 35 32 31 20 21<br>23 25 24 26 25 27 24 26 26 27 28   | OCTOBER, 19                          |
| 57          | 11 12 13 14 15 16 17 18 19 20 21 22                                  | 74 80 78 82 81 87 84 79 70 72 70 71 72 70 71 72 72 73 74 75 75 75 75 75 75 75 75 75 75 75 75 75   | 2 2 2  | 270 280 270 200 270 200 280 280 290 290 290 290 290 290 290 290 290 29                                    |                                       | 044                                     | 250 270 280 270 260 230 220 200 22 20 23 23 23 23 22 16                           | 110 100 105 105 110 110 120<br>12 11 21 19 19 13 10            |   | on I.  |  | 2 137 136 134 136 133 131 130 127 121 108 107 95 93  | 235 245 230 380 385 379 305 222<br>25 29 29 380 385 379 305 222   | 230 230 230 245 255 25 25 25 25 25 25 25 28 28 28 28 28 28 28 28 28 28 28 28 28   | 290 280 265 250 250 245 250 255 260 250 260 260 260 265 260 260 265 260 260 260 260 260 260 260 260 260 260  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 380 380 390 400 370 320 265<br>12 11 11 12 17 22 20                             | 105 105 105 110 105 110 112 120 E   | 20 23 25 24 20 25 27 24 26 20 27 28 20 21 28 20 21 28 20 21 29 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 29 20 21 20 20 20 20 20 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20 | OCTOBER, 19                          |
| 57          | 10 11 12 13 14 15 16 17 18 19 20 21 22                               | 78 74 80 78 82 81 87 94 79 70 72 70 71 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 2 2 2  | 280 270 270 260 270 280 280 290 290 290 290 290 290 290 290 290 29  |                                       | U U U 0460 465 3 4                      | 250 270 280 270 260 230 220 200 22 20 23 23 23 23 22 16                           | 100 105 105 110 110 120<br>11 21 19 19 13 10                   |   | on I.  | 1 m 10 11 12 13 14 15 16 17 18 19 20 21 22   | 132 137 136 134 136 133 131 130 127 121 106 107 95 93  | 245 20 36 36 370 0 252<br>5 21 35 35 370 5 5 2  | 230 230 245 250 250 250 250 255 262 265 265 265 275 27 28 28 28 28 28 28 28 28 28 28 28 28 28                             | 305 290 280 265 250 250 2545 250 254 26 10 13 15 10 9  | 0 0 0 450 450 660 750                    | 370 380 380 390 400 370 322 265<br>21 12 11 11 12 17 22 20                      | 105 105 105 110 105 110 112 120 E   | 27 26 23 26 24 26 25 27 24 26 20 27 28  | OCTOBER, 19                          |
| 57          | 09 10 11 12 13 14 15 16 17 18 19 20 21 22                            | 78 74 80 78 82 81 87 94 79 70 72 70 71 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 2 2 2  | 210 210 210 280 210 270 280 270 280 280 290 290 290 290 290 290 290 290 290 29                            |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | TABLE 59   | 09 10 11 12 13 14 15 16 17 18 19 20 21 22  | 26 26 24 23 24 23 26 25 25 25 23 22 24 23 20   | 235 245 230 380 385 379 305 222<br>25 29 29 380 385 379 305 222   | 230 230 230 245 255 25 25 25 25 25 25 25 28 28 28 28 28 28 28 28 28 28 28 28 28   | 290 280 265 250 250 245 250 255 260 250 260 260 260 265 260 260 265 260 260 260 260 260 260 260 260 260 260  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 345 370 380 380 390 400 370 320 265 25 21 12 11 11 12 17 32 20                  | 105 105 105 105 110 105 110 112 120 E                                     | 36 40 43 41 40 35 38 38 35 32 31 20 21 22 27 28 26 29 27 28   | OCT0BER, 15                          |
| TABLE 57    | 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                         | 50 76 74 80 78 82 81 87 94 79 70 72 70 71 28 28 26 27 28 28 28 28 28 29 29 29 29 29 27  | 2 2 2  | 210 270 280 270 270 280 270 280 280 280 290 290 290 290 290 290 290 290 290 29                            |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | TABLE 59   | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22  | 9 9 124 132 137 136 134 136 133 131 130 127 121 106 107 95 93 25 24 25 26 24 23 28 25 25 25 22 24 23 20  | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | 235 230 230 230 245 250 250 250 255 262 265 265 265 27 28 28 28 28 28 28 28 28 28 28 28 28 28                             | 305 290 280 265 250 250 2545 250 254 26 10 13 15 10 9  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 290 345 370 380 380 390 400 370 320 265<br>26 25 21 12 11 11 12 17 22 20        | 110 105 105 105 105 110 105 110 112 120 E                                 | 26 27 27 27 26 23 25 24 26 25 27 24 26 26 27 29 20 20 20 27 28  | OCT08ER.                             |
| TABLE 57    | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                      | 58 68 60 78 74 60 78 62 81 87 84 79 70 72 70 71<br>59 29 29 29 29 29 29 29 29 29 29 29 29 29  | 2 2 2  | 210 210 210 280 210 270 280 270 280 280 290 290 290 290 290 290 290 290 290 29                            |                                       | U U U 440                               | 220 250 270 280 270 260 230 220 200<br>21 22 20 23 23 23 23 22 16                 | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | Section 1. TABLE 9.  | (*COW)   | 2 66 95 124 132 137 136 134 136 133 131 130 127 121 108 107 95 93 2 22 25 24 26 26 24 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | 259 275 270 230 230 245 250 250 250 255 262 255 262 265 265 265 275 285 285 285 285 285 285 285 285 285 28                | 310 305 290 280 265 250 250 245 250 255 260 260 260 260 265 260 260 260 260 260 260 260 260 260 260  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 21 26 27 27 26 23 25 24 20 25 37 24 26 20 27 28 20 20 27 28   | OCT08ER.                             |
| TABLE 57    | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                   | 52 58 68 60 78 74 80 78 82 61 67 84 79 70 72 70 71 29 29 29 29 27 21 22 29 29 29 29 29 29 29 29 29 29 29 29   | 2 2 2  | 300 270 270 280 270 280 270 260 270 280 280 280 290 290 290 290 290 290 290 290 290 29                    |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | Section 1. TABLE 9.  | (*COW)   | 2 22 22 25 25 24 26 20 24 23 23 24 25 26 25 25 25 25 25 25 25 25 25 20 20 20 20 20 20 20 20 20 20 20 20 20   | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E 55 250 235 230 230 230 230 235 255 250 250 250 255 262 265 265 265 265 265 265 265 265                                  | 265 310 305 200 280 285 250 250 245 250 256 280 280 280 285 285 280 28 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 25 21 26 27 27 26 23 25 24 26 25 27 24 26 27 27 29 27 29 29 27 29 29 29 29 29 29 29 29 29 29 29 29 29   | OCT08ER.                             |
| TABLE 57    | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22                | 4.8 52 56 68 60 76 74 60 78 62 61 67 64 79 70 72 70 71 30 29 29 29 29 29 29 27 21 28 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28   | 3 2 2  | 300 300 270 270 280 270 280 270 280 280 280 280 290 290 290 290 290 290 290 290 290 29                    |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | Section 1. TABLE 9.  | (*COW)   | 76 772 68 95 124 132 137 136 134 136 131 130 127 127 121 106 107 95 93 22 22 22 25 24 26 26 26 24 23 26 25 25 25 25 25 25 20 20  | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E E E E E E E E E E E E E E E E E E E   | 255 265 310 305 260 280 265 250 250 245 250 255 260 260 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 265 260 260 260 260 260 260 260 260 260 260  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 23 25 21 26 27 27 26 23 25 24 26 25 27 24 26 26 27 29   | OCT08ER.                             |
| TABLE 57    | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22             | 5 50 48 52 58 68 80 78 74 80 78 62 81 67 64 79 70 72 70 71 29 71 29 59 59 59 59 59 59 59 59 59 59 59 59 59  | 3 2 2  | 300 300 300 270 270 280 270 270 280 277 27 24 28 28 29 29 29 30 28 29 29 29 29 29 29 29 29 29 29 29 29 29 |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | Section 1. TABLE 9.  | (*COW)   | 5 66 76 72 66 95 124 132 137 136 134 130 131 131 130 127 121 106 107 95 93 83 22 22 22 22 22 25 24 25 26 24 23 26 24 23 26   | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E E E E E E E E E E E E E E E E E E E   | 275 255 265 310 310 250 280 280 280 280 280 285 280 285 280 280 280 280 280 280 280 280 280 280  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 26 23 25 21 26 27 27 26 23 25 24 26 25 27 24 26 25 27 29 27 29  | OCT08ER.                             |
| TABLE 57    | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22          | 5 50 48 52 58 68 80 78 74 80 78 62 81 67 64 79 70 72 70 71 29 71 29 59 59 59 59 59 59 59 59 59 59 59 59 59  | 3 2 2  | 300 300 300 300 270 270 270 270 270 270 280 280 280 290 290 290 290 290 290 290 290 290 29                |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | Section 1. TABLE 9.  | (*COW)   | 8 23 23 22 22 22 25 25 24 26 25 24 25 23 24 23 25 25 25 25 25 25 25 25 25 25 25 25 25  | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E E E E E E E E E E E E E E E E E E E   | 260 265 275 255 265 310 3105 290 280 265 250 250 245 250 256 250 256 260 260 260 265 260 260 265 260 16 20 18 20 18 20 18 20 18 20 24 24 26 10 13 15 10 9  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 28 20 23 25 21 20 27 27 28 23 25 24 20 25 27 24 20 27 29 27 29 27 29 27 29 28 20 27 29  | 1.6 MC TO 17.0 IN 1 MINUTE. OCTOBER, |
| 57          | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22       | 94 55 50 46 52 56 66 80 78 74 80 78 82 80 87 70 71 70 71 70 71 72 | 3 2 2  | 300 300 300 300 270 270 270 270 270 270 280 270 280 280 280 290 290 290 290 290 290 290 290 290 29        |                                       | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 110 110 100 105 105 110 110 120<br>9 12 11 21 19 19 13 10      |   | TABLE 59   | (*COW)   | 9 9 9 66 86 76 72 6 9 95 124 132 137 136 134 136 131 131 130 127 121 108 107 95 93 18 22 22 25 22 25 24 25 24 25 24 25 25 25 24 25 25 25 25 25 25 25 25 25 25 25 25 25 | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E E E E E E E E E E S 250 255 250 235 230 230 230 235 250 250 250 250 255 26 25 21 28 28 28 28 28 28 28 28 28 28 28 28 28 | 250 260 265 275 255 265 310 305 290 280 265 250 250 245 250 256 265 260 260 265 260 11 18 20 18 22 21 23 23 17 18 17 20 15 20 25 24 24 16 13 15 10 9   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 27 28 26 23 25 21 26 27 27 28 25 24 26 25 27 24 26 25 27 27 28 27 29 28   | MC TO 17.0 IM 1 MINUTE. OCTOBER,     |
| TABLE 57    | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 94 55 50 46 52 56 66 80 78 74 80 78 82 80 87 70 71 70 71 70 71 72 | 3 2 2  | 290 290 300 300 300 300 270 270 280 270 260 270 260 280 280 280 290 290 290 290 290 290 290 290 290 29    | S S S S S S S S S S S S S S S S S S S | U U U 440                               | 200 220 250 270 280 270 260 230 220 200<br>19 21 22 20 23 23 23 23 23 22 16       | 1,0 110 110 100 105 105 110 110 120 10 110 110 120 120 120 120 | INC<br>DIVID                            | Section 1. TABLE 9.  | (*COW)   | 9 9 9 66 86 76 72 6 9 95 124 132 137 136 134 136 131 131 130 127 121 108 107 95 93 18 22 22 25 22 25 24 25 24 25 24 25 25 25 24 25 25 25 25 25 25 25 25 25 25 25 25 25 | 230 235 245 230 300 365 370 305 252 252 252 252 252 252 252 252 252 2   | E E E E E E E E E E E E E E E E E E E   | 260 265 275 255 265 310 3105 290 280 265 250 250 245 250 256 250 256 260 260 260 265 260 260 265 260 16 20 18 20 18 20 18 20 18 20 24 24 26 10 13 15 10 9  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    | 210 290 345 370 380 380 390 400 370 320 265<br>12 26 25 21 12 11 11 12 17 22 20 | 2 11 26 26 24 23 19 20 19 22 22 19  | 23 27 28 26 23 25 21 26 27 27 26 23 25 24 26 25 27 24 20 27 27 29 27 29 27 29 27 29 27 29 27 29 27 29 27 29   | 1.6 MC TO 17.0 IN 1 MINUTE. OCTOBER, |
| TABLE 57    | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 | 53 54 55 50 48 52 58 68 80 78 74 80 78 82 81 67 84 79 70 72 70 71 81 82 81 82 82 82 82 82 82 82 82 82 82 82 82 82   | 2 2 9  | 290 290 300 300 300 300 270 270 280 270 280 270 260 280 280 280 290 290 290 290 290 290 290 290 290 29    | 2.2                                   | 000000000000000000000000000000000000000 | 00 200 220 250 250 270 280 270 260 230 220 200 9 19 21 22 20 23 23 23 23 23 22 16 | 1,0 110 110 100 105 105 110 110 120 10 110 110 120 120 120 120 | CAD | Section 1. TABLE 9.  | CONTRIBUTION   CONT | WED 90 90 66 86 76 72 22 22 25 26 26 26 26 23 25 24 25 25 26 26 28 25 25 26 25 25 25 25 25 25 25 25 25 25 25 25 25   | 246 230 235 245 220 360 365 370 305 252 220 250 251 5 15 15 15 15 25 24 20 305 305 305 305 305 305 305 305 305 30 | E E E E E E E E E E E E E E E E E E E   | MED 245 250 260 265 275 255 265 310 305 290 280 265 250 250 245 250 255 260 260 265 260 CMT 9 11 18 20 18 22 21 23 23 17 18 17 20 15 20 24 24 24 16 13 15 10 9 U.D.  | 2 4 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 2 12 290 345 370 380 380 390 400 370 320 265 2 2 2 12 11 11 12 17 22 20         | E 125 110 105 105 105 105 105 110 105 110 112 120 E 2 2 2 2 11 2 2 2 2 19 | 28 23 27 28 20 23 25 21 20 27 27 20 23 25 24 20 25 27 24 20 27 27 29 27 29 29 27 29 29 27 29 29 27 29   | 1.6 MC TO 17.0 IN 1 MINUTE. OCTOBER, |
| TABLE 57    | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22    | 53 54 55 50 48 52 58 68 80 78 74 80 78 82 81 67 84 79 70 72 70 71 81 82 81 82 82 82 82 82 82 82 82 82 82 82 82 82   | 2 2 9  | 290 290 300 300 300 300 270 270 280 270 280 270 260 280 280 280 290 290 290 290 290 290 290 290 290 29    |                                       | 000000000000000000000000000000000000000 | 00 200 220 250 250 270 280 270 260 230 220 200 9 19 21 22 20 23 23 23 23 23 22 16 | 1,0 110 110 100 105 105 110 110 120 10 110 110 120 120 120 120 | fo Es MED CNT                           | Section 1. TABLE 9.  | (*COW)   | WED 90 90 66 86 76 72 22 22 25 26 26 26 26 23 25 24 25 25 26 26 28 25 25 26 25 25 25 25 25 25 25 25 25 25 25 25 25   | 246 230 235 245 220 360 365 370 305 252 220 250 251 5 15 15 15 15 25 24 20 305 305 305 305 305 305 305 305 305 30 | E E E E E E E E E E E E E E E E E E E   | 245 250 260 265 275 255 265 310 105 260 265 260 250 250 245 250 255 260 260 265 260 9 9 11 18 20 16 22 21 23 23 17 18 17 20 15 20 24 24 16 13 15 10 9  | 2 4 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 2 12 290 345 370 380 380 390 400 370 320 265 2 2 2 12 11 11 12 17 22 20         | E 125 110 105 105 105 105 105 110 105 110 112 120 E 2 2 2 2 11 2 2 2 2 19 | 28 23 27 28 20 23 25 21 20 27 27 20 23 25 24 20 25 27 24 20 27 27 29 27 29 29 27 29 29 27 29 29 27 29   | 1.6 MC TO 17.0 IN 1 MINUTE. OCTOBER, |

| 8                                     |   |  |   |   |   |   |   |  |  |   |
|---------------------------------------|---|--|---|---|---|---|---|--|--|---|
| 5                                     | 53  | 50 67  |   | 245   | 280   |   |   |  | 28   | 195   |
| TIME 45.0E                            | 22  | 76   |   | 250   | 2 6 8<br>4 8  |   | -   |  | 27   | OCTOBER, 1957                               |
| -                                     | 5 !   | o<br>6 □   |   | 250   |   |   |   |  | 13   | 00.00                                       |
|                                       | 50  |  |   | 260 2   |   |   |   |  | 31   |   |
|                                       | Н   |  | -   | 270 2   |   |   |   |  | 3.1  |   |
|                                       | 61  |  |   |   |   |   |   |  |  |   |
|                                       | 9   |  |   | 270   |   |   |   |  | 30   |   |
|                                       | -   |  |   | 250   |   |   | 265   | 115  | 30   |   |
|                                       | 9   |  | 390   | 238   |   |   | 340   | 110  | 40   |   |
|                                       | ū   |  | 410   | 230   |   |   | 392   | 007  | 12   |   |
|                                       | 4   |  |   |   |   |   |   | 100  | 4  |   |
|                                       | 5   |  | 350   |   |   |   |   | 1000   |  |   |
|                                       | 12  |  |   |   |   |   |   | 1000   |  |   |
| 2                                     | Н   |  |   | 200   |   |   |   | 001  |  |   |
| TABLE 62                              | =   |  |   | > N   |   |   |   | 0.0  |  |   |
| ∀ ⊢                                   | 0   |  |   |   |   |   |   | 100  |  |   |
|                                       | 8   | 0 6 1  |   | 215   |   |   |   | 100  |  |   |
|                                       | 90  | e -  |   | 225   |   |   |   | 105  | 39   |   |
| 5E                                    | 0.4   |  |   | 235   |   |   | 310   | 105  | 12   | SATURATION OF ME TO 20,00 ME ON TO MINUTES. |
| 47.                                   | 8   | 95   |   | 30  | 305   |   | 245   | 110  | 30   | N N   |
| 9 8 5                                 | \$0   | 30   |   | 30  | 265   |   | 2.5   | E 26   | 90   | 2   |
| TANANARIVE, MADAGASCAR 118,85, 47,5E1 | 8   | 27   |   | 250   | 265   |   | 17  | 17   | 17   | ×   |
| SASCA                                 | 03  | 0.00   |   | 255 2   | 270 2   |   | 0   |  | 17   | 20.0  |
| MADAC                                 |   | 72 7   |   | 250 25  |   |   | 4 °   | ω φ  | 29   | 01  |
| * E                                   | 8   |  |   |   | 250   |   | ш   | ω  |  | 25.0  |
| ANAR                                  | ō   | 23   |   | 2.28<br>2.55<br>2.55  | 280   |   |   |  | 30   | 0   |
| A                                     | 8   | 98 25  |   | 242   | 275   |   | m ~   | w ~  | 18   | , a   |
|                                       |   | MEO<br>CN →<br>CN →  | CNT   | ME0<br>CNT<br>U0  | MEO<br>CNT<br>UQ  | MEO                                     | MEO   | CNT  | CNT  |   |
|                                       |   |  |   |   |   |   |   |  |  |   |
|                                       | HOUR  |  |   |   | 701F2   |   |   |  |  |   |
|                                       | HOUR  | lo F2  | h' F2   | .u  | (M 3000)F2  | fo F1                                   | fo E  | ب.<br>ا  | fo Es  |   |
|                                       | HOUR  | fo F2  | h F2  | ш.<br>Ге  | (M 3000)F2  | fo F1                                   | fo E  | ъ.<br>В  | fo Es  |   |
| 0 €                                   |   |  | h.<br>F2                                      | 'E  |   | fo F1                                   | fo E  | <u>ч</u>   |  | 5.5   |
| E 45*0E                               | 23  | 100  | h' F2   | 290<br>22   | 250   | fo F1                                   | fo E.   | <u>a</u>   | 34   | 4. 1957                                     |
| 71ME 45+0E                            |   | 100 0<br>100 100<br>17 17  | h, F2   | 312 290 h   | 0 0 230 250 5 11  | fo F1                                   | fo E  | ₩<br><u>-</u> -  | 25 34<br>30 28   | TOBER, 1957                                 |
| 7.1ME 45.0E                           | 23  | 96 100 100<br>19 17 17   | -B  | 375 312 290<br>19 20 22   | 225 230 250<br>11 5 11  | fo F1                                   | 10 E  | ш<br>Ге  | E 25 34 29 30 28   | OCTOBER, 1957                               |
| 7.1ME 45+0E                           | 22 23   | 0 0 0 0 0 88 96 100 100 17 17 17 17 17   | h.  | 430 375 312 290<br>13 19 20 22  | 230 225 230 250<br>9 11 5 11  | fo F                                    | fo E  | ш<br>Те  | £ E 25 34 29 20 28   | OCTOBER 1957                                |
| 71ME 45+0E                            | 21 22 23  | 96 100 100<br>19 17 17   | . Z   | 375 312 290<br>19 20 22   | 200 230 225 230 250<br>29 39 11 5 11  | 10 F I                                  | 10 €  | ш<br>'с  | E 25 34 29 30 28   | OCTOBER* 1957                               |
| 71ME 45.0E                            | 20 21 22 23   | 0 0 0 0 0 88 96 100 100 17 17 17 17 17   | 735   | 430 375 312 290<br>13 19 20 22  | 200 230 225 230 250<br>29 39 11 5 11  | fo F 1                                  | E 10 E  | E h' E 25  | 10 29 29 30 28   | OCTOBER 1957                                |
| TIME 45.0E                            | 19 20 21 22 23  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 735<br>1                                      | 335 462 430 375 312 290 h'  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | [ L 0]                                  | E<br>22   | E 25   | 30 29 29 30 28   | OCTOBER . 1957                              |
| TIME 45.0E                            | 18 19 20 21 22 23   | 1122 108 96 96 100 100 23 28 29 17 19 17 17  | 250 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0       | 272 335 462 430 375 312 290 h'  | 222 205 200 230 225 230 250<br>14 20 29 39 11 5 111   |   | 270 E<br>17 22  | 125 E h'   | 36 E E E 25 34<br>26 30 29 29 30 28  | 0CT08ER 1957                                |
| TIME 45.0E                            | 16 17 18 19 20 21 22 23   | 128 122 108 96 86 95 100 100 2 55 2 23 28 29 17 19 17 17   | 475 520 735<br>475 520 735                    | 255 272 335 462 430 375 312 290 h'  | 215 222 205 200 230 025 230 290 11 17 14 20 29 49 11 5 11 5 111   | 770<br>770                              | 350 270 E<br>23 17 22   | 120 125 E h'   | 90 56 36 E E E 25 34<br>30 30 26 30 29 29 30 28  | OCTOBER 1957                                |
| 71ME 45.0E                            | 15 16 17 18 19 20 21 22 23  | 134 128 127 108 % 68 96 100 100 123 128 23 28 29 17 19 17 17   | 540 475 520 735 N.                            | 240 255 272 335 462 430 375 312 290 h <sup>2</sup>  | 205 215 222 205 200 230 225 230 290 1   | 860 770<br>2 770                        | 395 350 270 E<br>18 23 17 22  | U 120 120 125 E h'   | 93 90 56 36 E E 25 34<br>28 30 30 26 30 29 29 30 28  | OCTOBER . 1957                              |
| 30°5" 34'1                            | 14 15 16 17 18 19 20 21 22 23   | 136 134 128 122 106 96 86 96 100 100 2 27 23 28 29 17 17 17 17   | 500 500 475 520 735 h;                        | 240 240 255 272 335 462 430 375 312 290 h <sup>2</sup>  | 205 205 215 222 205 209 U U U U U U U U U U U U U U U U U U U   | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 420 395 350 270 E<br>21 18 23 17 22   | U U U 120 126 E h'   | 97 93 90 56 36 E E E 25 34 29 28 29 30 29 28 36  | OCTOBER 1957                                |
| TIME 45.0E                            | 13 14 (5 16 17 18 19 20 21 22 23  | 136 136 134 124 126 125 126 96 10 U U U U U U U U U U U U U U U U U U  | 500 590 U U U U U U U U U U U U U U U U U U U | 238 240 240 255 272 335 462 430 375 312 200 h <sup>2</sup>  | 205 205 205 215 222 205 200 210 U U U U U U U U U U U U U U U U U U U   | 820 940 860 770<br>8 6 2 72             | υς 4.20 395 350 270 E<br>0.21 18 23 17 22   | U 120 120 125 E h'   | 97 97 93 90 56 36 E E 25 34<br>29 29 29 28 30 30 26 30 29 29 29 30 28  | QCTORER . 1957                              |
|                                       | 14 15 16 17 18 19 20 21 22 23   | 138 138 138 134 128 128 108 96 109 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 570 580 540 475 520 735 h;                    | 230 238 240 240 255 272 335 462 430 375 312 290 hi  | 265 205 205 205 215 222 205 200 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 850 800 800 770                         | υς 4.20 395 350 270 E<br>0.21 18 23 17 22   | 12 12 120 120 120 E  | 95 97 97 93 90 56 36 E E E 25 34 29 29 29 29 28 30 28  | 0CT08ER* 1957                               |
|                                       | 13 14 (5 16 17 18 19 20 21 22 23  | 140 138 138 138 134 128 127 108 % 88 % 100 100 100 100 100 100 100 100 100 1   | 450 570 580 590 540 475 560 735 h'            | 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 265 205 205 205 215 222 205 200 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 820 940 860 770<br>8 6 2 72             | 40 440 435 420 395 270 U E  | 120 E U U 120 125 E 120 125 E 135 125 135 135 135 135 135 135 135 135 135 13 | 27 20 29 20 20 20 30 50 30 20 30 20 29 20 20 20 20   | OCTOBER : 1957                              |
| TABLE 0.1 TIME 45.0E                  | 12 13 14 15 16 17 18 19 20 21 22 23                                     | 145 140 138 136 138 134 128 127 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 470 450 570 580 590 940 475 520 735 h;        | 235 238 230 238 240 240 255 272 335 442 430 375 312 290 h <sup>-</sup><br>17 18 15 12 18 22 25 28 29 28 13 19 20 22   | 265 205 205 205 215 222 205 200 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 850 800 800 770                         | 425 440 440 435 420 395 350 270 E   | 115 120 12 120 120 125 E   | 95 97 97 93 90 56 36 E E E 25 34 29 29 29 29 28 30 28  | 000000                                      |
|                                       | 11 12 13 14 15 16 17 18 19 20 21 22 23                                  | 140 138 138 138 134 128 127 108 % 88 % 100 100 100 100 100 100 100 100 100 1   | 450 570 580 590 540 475 560 735 h'            | 240 235 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 240 218 210 205 205 205 205 215 222 205 200 230 225 225 250 250 250 250 250 250 250 25  | 850 800 800 770                         | 399 425 440 440 435 420 399 350 20 E<br>20 13 14 13 18 2 21 16 23 17 22                     | 120 U U U U U U U U U U U U U U U U U U U  | 27 20 29 20 20 30 30 56 30 20 30 20 29 20 20 20 20   | OCTOBER, 1957                               |
| TABLE 61                              | 10 11 12 13 14 15 16 17 18 19 20 21 22 23                               | 145 140 138 136 138 134 128 127 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 470 450 570 580 590 940 475 520 735 h;        | 240 235 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 265 205 205 205 215 222 205 200 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 850 800 800 770                         | 399 425 440 440 435 420 399 350 20 E<br>20 13 14 13 18 2 21 16 23 17 22                     | 120 120 11 8 12 120 120 128 E  | 27 27 29 29 37 97 93 90 59 36 36 E E 25 34 27 27 29 29 29 30 28 30 30 30 30 30 30 30 30 30 30 30 30 30   | OCTOBER - 1957                              |
| TABLE 61                              | 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23                            | 147 145 140 138 136 136 136 134 128 122 108 96 86 96 100 100 27 28 28 29 17 19 17 17 17  | 470 450 570 580 590 940 475 520 735 h;        | 250 240 235 236 230 236 240 240 255 272 335 462 430 375 312 290 hi  | U U U U U U U U U U U U U U U U U U U   | 850 800 800 770                         | 0 55 396 425 440 440 435 420 395 350 0 E  | 115 120 12 120 120 125 E   | 064 040 040 05 02 07 07 03 00 050 35 E E E 25 3 34 20 27 27 20 20 20 20 30 20 20 30 20 20 20 20  |   |
| TABLE 61                              | 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23                      | 29 27 28 30 29 29 27 27 28 30 29 29 27 27 28 30 29 27 29 27 28 28 29 29 27 29 29 29 29 29 29 29 29 29 29 29 29 29                        | 470 450 570 580 590 940 475 520 735 h;        | 260 250 240 235 238 230 238 240 240 255 272 335 462 430 375 312 290 h <sup>-</sup> 27 28 26 17 18 15 12 18 22 25 28 26 13 19 20 22                                    | 262   | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 46 52 64 96 99 99 95 97 97 93 90 56 36 36 25 34 25 34 26 20 20 20 20 20 20 20 20 20 20 20 20 20  |   |
| TABLE 61                              | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23                   | 25 25 29 27 28 30 29 29 27 23 28 29 17 19 17 19 17 17 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 470 450 570 580 590 940 475 520 735 h;        | 210 260 250 240 235 238 230 238 240 240 255 272 335 462 430 375 312 290 hi  | 218 282 285 240 218 210 205 205 205 205 215 222 205 200 230 225 205 200 2 20  | 850 800 800 770                         | 0 55 396 425 440 440 435 420 395 350 0 E  | 120 120 11 8 12 120 120 128 E  | 41 46 52 64 96 99 90 95 97 97 93 90 56 36 E E 25 34 26 28 28 30 30 28 30 20 20 20 20 20 20 20 20 20 20 20 20 20  |   |
| TABLE 61                              | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23                | 82 92 125 140 147 145 140 138 136 136 134 128 122 108 96 88 96 100 100 10 10 10 10 10 10 10 10 10 10 1                                   | 470 450 570 580 590 940 475 520 735 h;        | 240 270 260 255 240 235 238 230 238 240 240 255 272 335 442 430 375 312 290 hi  | 265 278 262 265 240 218 210 205 205 205 205 215 222 205 200 230 225 250 250 250 250 250 250 250 250 25  | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 40 41 46 52 66 96 96 95 97 97 93 90 56 36 36 2 25 35 36 26 26 37 27 20 29 20 20 30 26 30 20 20 20 20 20 20 20 20 20 20 20 20 20  |   |
| TABLE 61                              | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23             | 86 82 92 125 140 147 145 140 138 136 138 134 128 122 108 96 86 96 100 100 10 10 10 10 10 10 10 10 10 10 1                                | 470 450 570 580 590 940 475 520 735 h;        | 250 240 270 260 250 240 235 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 260 285 278 282 285 240 218 210 205 205 205 205 205 205 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 225 200 230 200 200 200 200 200 200 200 200 | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 19 440 41 440 52 664 90 90 95 92 97 93 90 56 36 26 26 25 34 25 36 26 26 26 26 26 36 26 26 36 26 26 36 36 26 36 36 36 36 36 36 36 36 36 36 36 36 36   |   |
| TABLE 61                              | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23                | 0  | 470 450 570 580 590 940 475 520 735 h;        | 255 250 240 270 260 250 240 235 238 230 230 238 240 240 255 272 335 462 430 375 312 290 h <sup>-</sup> 31 28 27 26 240 250 240 250 250 250 250 250 250 250 250 250 25 | 268 280 285 278 262 265 240 219 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 24 30 40 41 40 52 64 90 95 97 97 93 90 56 35 26 30 29 29 30 20 20 30 30 56 30 6 20 20 20 30 20 30 20 20 20 30 20 20 20 20 20 20 20 20 20 20 20 20 20 |   |
| TABLE 61                              | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23             | U U U U U U U U U U U U U U U U U U U  | 470 450 570 580 590 940 475 520 735 h;        | 260 255 250 240 270 260 250 240 235 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 265 266 280 285 278 262 265 240 218 210 205 205 205 215 212 227 205 200 210 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 19 440 41 440 52 664 90 90 95 92 97 93 90 56 36 26 26 25 34 25 36 26 26 26 26 26 36 26 26 36 26 26 36 36 26 36 36 36 36 36 36 36 36 36 36 36 36 36   |   |
| TABLE 61                              | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23          | 0 86 86 82 92 125 140 147 145 140 138 136 134 128 127 108 96 88 96 100 100 2 2 26 24 25 25 25 25 27 28 30 29 27 23 28 29 17 19 17 17 17  | 470 450 570 580 590 940 475 520 735 h;        | 255 250 240 270 260 250 240 235 238 230 230 238 240 240 255 272 335 462 430 375 312 290 h <sup>-</sup> 31 28 27 26 240 250 240 250 250 250 250 250 250 250 250 250 25 | U U U U U U U U U U U U U U U U U U U   | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 24 30 40 41 40 52 64 90 95 97 97 93 90 56 35 26 30 29 29 30 20 20 30 30 56 30 6 20 20 20 30 20 30 20 20 20 30 20 20 20 20 20 20 20 20 20 20 20 20 20 |   |
|                                       | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23       | U U U U U U U U U U U U U U U U U U U  | 470 450 570 580 590 940 475 520 735 h;        | 260 255 250 240 270 260 250 240 235 238 230 236 240 240 255 272 335 462 430 375 312 290 hi  | 70 U U V V V V V V V V V V V V V V V V V  | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 24. 24 30 40 41 46 22 64 96 96 95 97 97 93 90 56 36 26 20 25 34 25 26 20 27 27 25 29 29 20 30 30 28 30 20 20 20 20 20 20   | SWEP 1.25 MC TO 20.0 MC IM ID MINUTES.      |
| TABLE 61                              | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23    | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 470 450 570 580 590 940 475 520 735 h;        | 260 260 255 256 240 270 260 250 240 235 238 230 238 240 240 255 272 335 462 430 375 312 290 hi  | 70 U U V V V V V V V V V V V V V V V V V  | 850 800 800 770                         | 2 20 25 26 25 398 425 440 440 435 420 395 350 20 E<br>2 21 26 26 13 14 13 16 21 16 23 17 22 | 120 120 US US US 120 E U U U U 120 125 E S U U U U U U U U U U U U U U U U U U   | 25 28 28 29 27 25 28 28 28 28 29 27 27 27 29 29 20 30 28 30 30 20 30 20 30 20 20 20 20   |   |
| TABLE 61                              | 00 01 02 03 04 05 06 07 09 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 | 100 96 90 86 86 82 92 125 140 147 145 140 138 136 134 128 122 108 96 88 96 100 100 100 128 122 123 22 22 22 22 22 22 22 22 22 22 22 22 2 | 430 470 430 590 590 590 590 735 N             | 265 260 260 255 250 240 270 260 250 240 235 238 240 230 238 240 240 255 272 335 442 430 375 312 290 hi  | HED 710 265 265 266 280 285 278 262 265 240 218 210 205 205 205 205 205 205 207 20 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 80 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | E U U U V V V V V V V V V V V V V V V V   | 22 120 120 12 13 120 130 120 130 135 E   | 25 25 24 24 20 10 40 41 46 52 64 96 90 95 97 97 93 90 56 36 36 26 29 29 27 25 28 28 28 29 27 25 28 28 28 28 28 28 28 28 28 28 28 28 28   | SWEEP 1.25 MC TO 20.0 MC 1M 10 MINUTES.     |
| TABLE 61                              | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23    | 100 96 90 86 86 82 92 125 140 147 145 140 138 136 134 128 122 108 96 88 96 100 100 100 128 122 123 22 22 22 22 22 22 22 22 22 22 22 22 2 | 430 470 430 590 590 590 590 735 N             | 265 260 260 255 250 240 270 260 250 240 235 238 240 230 238 240 240 255 272 335 442 430 375 312 290 hi  | 70 U U V V V V V V V V V V V V V V V V V  | 80 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | E U U U V V V V V V V V V V V V V V V V   | 22 120 120 12 13 120 130 120 130 135 E   | 25 25 24 24 20 10 40 41 46 52 64 96 90 95 97 97 93 90 56 36 36 26 29 29 27 25 28 28 28 29 27 25 28 28 28 28 28 28 28 28 28 28 28 28 28   |   |

| £ 63  |  |
|-------|--|
| TABLE |  |

|   |                          | HOUR | to F 2           | 7,<br>F2 | LL<br>E       | (M3000) F2           | to F  | fo E  | -E                                      | fo E s  |
|---|--------------------------|------|------------------|----------|---------------|----------------------|-------|-------|---|---------|
|   |                          |      | CNI              | CNT      | CNT           | MEO                  | MED   | MEO   | MEO                                     | MEO     |
| 0000                                    | DECE                     | 00   | 0.6              |          | 240<br>31     | 300                  |       | ω (   | م ب                                     | 3 3 3   |
| 101                                     | NO. 10.                  | ō    | 30               |          | 265<br>30     | 30                   |       | ω .   | ۰ ،                                     | 3.13    |
| -                                       |                          | 0.5  | 29               |          | 280<br>29     | 290                  |       | 1 t   | 14                                      | 3<br>31 |
|   | 63.05.                   | 03   | 31               | 300      | 30            | 290                  |       | E 15  | 9 1                                     | 30      |
| 100 00 00 00 00 00 00 00 00 00 00 00 00 | • 000                    | 0.4  | 29               | 385      | 250           | 290                  |       | 9     | ~                                       | 5.6     |
|   | 2                        | 0.5  | 31               | 340      | 30            | 305                  | 500   | 190   | 1 | 5.0     |
|   |                          | 90   | 2 9 1            | 380      | 190           | 315                  | 7 0 7 | 250   | 101                                     | 5.6     |
|   |                          | 0.7  | 31               | 360      | 31            | 318                  | 200   | 300   | 8-                                      | 30      |
|   |                          | 80   | 30               | 420      | 30            | 325                  | 250   | 320   | 9.9                                     | 30      |
|   |                          | 8    | 28               | 355      | 180           | 330                  | 680   | 370   | 00                                      | 8.8     |
|   |                          | 0    | 30               | 385      | 30            | 325 3                | 630 6 | 360 3 | 100                                     | 5.6     |
| 3                                       |                          | =    | 30               | 300      | 30            | 335 3                | 000   | 340   | 200                                     | 5.5     |
|   |                          | 2    | 30               | 365      | 30 1          | 332 3                | 0 0 0 | 360 3 | 16                                      | 30      |
|   |                          | 0    | 28 1             | 420 3    | 180 1         | 330 3                | 0 490 | 370 3 | 9 ~                                     | 28      |
|   |                          | 4    | 116 1            | 210      | 180 1         | 345 3                |       | 340 3 | 52 ~                                    | 2.8     |
|   |                          | 5    | 30               |          | 300           | 338 3                | -     | 340   | 0 m                                     | 62      |
|   |                          | 9    | 29               |          | 1 80 1        | 345 3                |       |       | 56                                      | 5.6     |
|   |                          | 2.   | 30               |          | 300 2         | 22 3                 |       | 280 2 | 0.0                                     | 5.6     |
|   |                          | 91   | 27               |          | 2000 2 288    | 350 3                |       | 240   | 101                                     | 5.6     |
|   |                          | 6    | 28               |          | 300 2         | 340 3                |       | > ~   | ρ ~                                     | 3.0     |
|   |                          | 50   | 29               |          | 2 20 2        | 27 3                 |       | 2 6   | _                                       | 2 6 Z   |
| i                                       | -                        | 2    | 30               |          | 220 2<br>30 2 | 320 3                |       | - E   | -                                       | 2.8 E   |
|   | IME 60.0W                | 22 2 | 30               |          | 240 2<br>30 2 | 310 3                |       | - 0   |   | 29 E    |
|   | MO.                      | 23   | 300              |          | £ 250         | 305                  |       | ~     | in.                                     | 31      |
|   |                          | ЭН   | 10 F Z           | h'F2     | -E            | (M 3000) F2          | 1904  | 10 E  | .е<br>В                                 | fo Es   |
|   |                          | HOUR | MEO<br>CNT<br>U0 | MEO      | ON CAN        | JF2 ME0<br>CNT<br>UQ | MEO   | MEO   | MEO                                     | MEO     |
|   | P0                       | 00   | 28 2 2 8         |          | 308<br>28     | 250                  | -     |       |   | 52.52   |
|   | TIERS                    | õ    | 272              |          | 305<br>27     | 260                  |       |       |   | 22      |
|   | • FRA                    | 0.5  | 27               |          | 300<br>26     | 260                  |       |       |   | 3 62    |
|   | NCE                      | 03   | 28               |          | 300<br>25     | 265                  |       |       |   | E 29    |
|   | POITIERS, FRANCE 196.6N. | 0.4  | 28               |          | 300<br>25     | 260                  |       |       |   | 20      |
|   | • 0.3E)                  | 90   | 52               |          | 268           | 275                  |       | 170   | ω                                       | 19      |
|   | Û                        | 90   | 5 6 2            | 950      | 250           | 295                  | 330   | 210   | 130                                     | 23      |

| 23  | 20      |       | 280        | 245                                     |       |       |         | 30    |
|-----|---------|-------|------------|---|-------|-------|---------|-------|
| 22  | 30      |       | 265        | 250                                     |       |       |         | 21    |
| 12  | 30      |       | 255<br>30  | 260                                     |       |       |         | 24    |
| 02  | 225     |       | 250        | 255                                     |       | 230   |         | 306   |
| 61  | 0 74 27 |       | 250        | 252                                     |       | 2 8 8 | E 2.9   | 300   |
| 99  | 27      | 280   | 250        | 280                                     |       | 190   | 9<br>10 | 30    |
| -   | 200     | 315   | 250        | 270                                     | 074   | 270   | 110     | 29    |
| 9   | 107     | 342   | 250        | 260                                     | 500   | 3.25  | 105     | 32    |
| 5   | 30      | 325   | 245        | 7 | 260   | 365   | 100     | 28    |
| ā.  | 110     | 335   | 240        | 260                                     | 580   | 370   | 100     | 2.7   |
| 5   | 112     | 345   | 235        | 760                                     | 0 4 9 | 385   | 100     | 36    |
| 1.2 | 110     | 355   | 240        | 240                                     | 570   | 395   | 100     | 0 4 5 |
| =   | 108     | 365   | 240        | 280                                     | 560   | 380   | 100     | 1 0 0 |
| 2   | 109     | 272   | 230        | 265                                     | 520   | 370   | 100     | 1 0 0 |
| 60  | 100     | 278   | 230        | 288                                     | 520   | 36.2  | 100     | 36    |
| 88  | 0 9 7   | 365   | 240        | 290                                     | 087   | 330   | 100     | 9.00  |
| 0.2 | 86      | 2 5 7 | 240        | 282                                     | 0.4   | 280   | 110     | 30    |
| 90  | 5 6 2   | 20 4  | 250        | 295                                     | 330   | 210   | 130     | 23    |
| 90  | 28 5 2  |       | 268        | 275                                     |       | 170   | ω       | 29    |
| 0.4 | 282     |       | 300<br>25  | 111                                     |       |       |         | 20    |
| 03  | 788     |       | 300        | 13                                      |       |       |         | E 29  |
| 0.5 | 27      |       | 300<br>300 | 13                                      |       |       |         | 2 6 7 |
| õ   | 2 2 2   |       | 305<br>27  | 260                                     |       |       |         | 22    |
| 00  | 28 2    |       | 308<br>28  | 250                                     |       |       |         | 23    |
|     | 9F00    | 0100  | 0 + 0 0    | 0 - 0 0                                 | 0 F   | 0 H   | 0 F     | 0 F   |

SEPTEMBER: 1957

SWEEP 1.6 MC TO 17.0 MC IN 1 MINUTE.

OCTOBER: 1957

SWEEP 1+5 MC TO 18+0 MC IN 30 SECONUS.

TABLE 64

|            |                    | CASABL    | CASABLANCA, MOROCCO 133.6N, 7.6WI                          | HOROCC        | 0 (33     | 2<br>0    | 7 . 6 M |        |       |       | TABLE | E 65            |            |          |               |            |          |       |               |       |             |                  | <u>×</u>        | TIME 0.0  |    |           |                    | ОЕГН    | 0ELMI: INDIA (28.6N: 77.2E)                     | A 4 ( | 8<br>6<br>8 | 77.5  | E)           |       |     |        |       | TABLE | 9   |     |     |       |       |        |                  |                  |             |      | TIME            | TIME 75.0E  |   |
|------------|--------------------|-----------|--|---------------|-----------|-----------|---------|--------|-------|-------|-------|-----------------|------------|----------|---------------|------------|----------|-------|---------------|-------|-------------|------------------|-----------------|-----------|----|-----------|--------------------|---------|---|-------|-------------|-------|--------------|-------|-----|--------|-------|-------|-----|-----|-----|-------|-------|--------|------------------|------------------|-------------|------|-----------------|-------------|---|
| HOUR       |                    | 8         | 9  | 03            | g         | 8         | 8       | 07     | 88    | 6     | ō     | =               | ~          | 2        | 4             | 5          | 9        | -     | œ.            | 6     | 2           | 2                | 22              | 23        |    | HOUR      |                    | 8       | ō   | 8     | 50          | 8     | 90           | 8     | 20  | 90     | 8     | 2 □   | =   | 2   | 5   | 4     | €     | 9      | 7                | 61               | 19 20       | 2    | ន               | 23          |   |
| fo F2      | CNT                | 15        | 80 80<br>14 15   | 5 15          | 15        | 14        | 14      | 12     | 99    | 101   | 92    | 105             | 110        | 119      | 3 14          | 116        | 118      | 5 118 | 110           | 5 15  | 150         | 15               | 3 84            | 15        | *  | to F2     | CNT                | 2 9 2 9 | 76  | 20    | 63          | 62    | 300          | 29    | 101 | 118    | 26    | 134   | 28  | 23  | 27  | 148 1 | 28    | 29     | 142 137<br>29 29 | 17 130           | 0 1111 8 25 | 21   | 27              | 90 58       |   |
| h' F2      | CNT                |           |  |               |           |           |         | 505    | 250   | 252   | 320   | 350             | 345        | 355      | 350           | 350        | 330      | 300   | 275           | 0.0   |             |                  |                 |           | "E | . F2      | MED<br>CNT<br>UQ   |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      |                 |             |   |
| и<br>~e    | CNT                | 300<br>13 | E E 8 300 300 15 15  | 6 290<br>5 15 | 280<br>14 | 278<br>14 | 285     | 240    | 240   | 230   | 230   | 230<br>230<br>2 | 250<br>250 | 250 is   | E 2 2         | 2 240      | 245      | 5 250 | 2 270 270     | 3 15  | 250<br>5 15 | 270<br>270<br>15 | E 290           | 900<br>14 | £  | h' F      | CNT                |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      |                 |             |   |
| (M3000) F2 | CNT                | 265       | 13 12  | 270           | 275       | 262       | 290     | 322    | 315   | 322   | 285   | 280             | 272        | 262      | 2 270         | 270 270 12 | 2 270    | 280   | 285           | 300   | 292         | 255              | 5 258<br>9 10   | 262       | \$ | (M3000)F2 | 2 MEO<br>CNT<br>UQ | 260     | 260   | 260   | 265         | 260   | 280          | 295   | 310 | 300    | 280   | 260   | 260 | 260 | 280 | 255 2 | 260 2 | 260 2  | 18 1             | 280 270<br>17 11 | 1 12        | 260  | 260             | 21 21       |   |
| \$<br>F    | MED                |           |  |               |           |           |         | 340    | 004   | 530   | U 470 | 580             |            | 630      | 004<br>004    | 0 620      | 0 530    |       |               |       |             |                  |                 |           | ¥  | fo F1     | MEO                |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      |                 |             |   |
| fo E       | MED                |           |  |               |           |           | 150     | 240    | 305   | 345   | 380   | 395             |            |          |               | 370<br>8   | 350      | 305   | 5 230         | 0 180 |             |                  |                 |           | 2  | о<br>Б    | MED                |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      |                 |             |   |
| <u>.</u> e | MED                |           |  |               |           |           | 3       | 115    | 112   | 110   | 105   | 108             | 105        | 108      | 8 105<br>8 11 | 5 105      | 3 15     | 108   | 8 120<br>2 10 | 0 125 |             |                  |                 |           | £  | اء.<br>ق  | MEO                |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      |                 |             |   |
| fo E a     | MED                | 22        | 21 21 15   | 1 19          | 19        | n 1,      | 4.      | 1,4    | 34    | 38    | 140   | 13              | 111        | £ #<br>B | 11            | 1 13       | 3 15     | 35    | 5 30          | 5 29  | 20          | 24               | 5 15            | 31        | ž. | fo Es     | MED                |         |   |       |             |       |              |       |     |        |       |       |     |     |     |       |       |        |                  |                  |             |      | į               |             |   |
|            |                    | AHMEO A   | аннЕолемо INOIA (33.004 72.eE)                             | 410I          | 23 ° 0N i | 72.0      | , E     |        |       |       | TABLE | E 67            |            |          |               |            |          |       |               |       |             |                  | ₩ X             | W W 20    |    |           |                    | CALC    | TABLE   | IONI  | 123         | · NO  | 88<br>9<br>0 | _     |     |        |       | TABLE | 9   |     |     |       |       |        |                  |                  |             |      | 7. PME 90.0E    | 77.4E 90.0E |   |
| HOUR       |                    | 00        | 01 02  | 0.3           | 0.4       | 90        | 90      | 07     | 90    | 8     | 0     | =               | 12         | 5        | 5             | 5          | 9        | 1     | 8             | 0     | 2           | 2                | 22              | 23        |    | HOUR      | ar                 | 00      | ō   | 05    | 63          | 90    | 90           | 90    | 07  | 8      | 60    | 0     | F   | 2   | ū   | 4     | 5     | 91     |                  | 18               | 02 61       | ~    | 22              | 23          | _ |
| foF2       | S S S              | 113       | ∞ v  | m.n           |           |           | 74      | 108    | 1     |       |       |                 |            |          |               |            |          | 1     | 0.4           | 1     |             |                  |                 |           |    | fo F.2    | CNT                | _       | _   | 105   | 76          | 2 6 1 | 244          | 82    | 115 | 122    | 23    | 22    | 22  | 20  | 20  | 20 02 | 200   | 0 0 0  | 22               | 6                | 26 25       | 130  | 125             | 125         |   |
| n. F2      | MEO                |           |  |               |           |           |         |        | 250   | 250   | 325   | 380             | 24         | 7 700    | 390           | 380        | 330      | 285   | 270           | 0.50  |             |                  |                 |           | E  | h'F2      | MED<br>CNT<br>UQ   |         |   |       |             |       |              |       |     |        | 285   | 320   | 700 | 18  | 410 | 19 4  | 18 18 | 360    |                  |                  |             |      |                 |             |   |
| ъ<br>-с    | MEO                | 280       | 270 250 28 28  | 0 240         | 250       | 270       | 275     | 250    | 240   | 230   | 220   | 230             | 225        | 245      | 5 245         | 3 17       | 7 21     | 1 18  | 8 25          | 280   | 285         | 270              | 0 30            | 280       | E  | ъ.<br>-с  | MED<br>CNT<br>UQ   | 260     | 255   | 250   | 240         | 250   | 250          | 260   | 250 | 240    | 250   | 250   | 245 | 235 | 230 | 240   | 250 2 | 250 2  | 250 28           | 280 30           | 300 270 27  | 260  | 260             | 260         |   |
| (M3000) F2 | 2 MED<br>CNT<br>UQ | 260       | 275 300 24 21  | 275           | 260       | 270       | 290     | 305    | 305   | 275   | 250   | 245             | 245        | 245      | 3 13          | 3 15       | 255 5 13 | 3 260 | 265           | 5 260 | 260         | 260              | 5 21            | 265       |    | (M3000)F2 | 2 MED<br>CNT<br>UO | 350     | 370   | 360   | 350         | 350   | 340          | 350   | 370 | 350    | 330   | ~     |     |     |     |       |       |        |                  | 6                | 3 50        | 360  | 360             | 340         |   |
| 10 F J     | MED                |           |  |               |           |           |         |        | 510   | 520   | 550   | 570             | 000        | 620      | 0 640         | 0 640      | 0 000    | 510   | 0.0           |       |             |                  |                 |           | -  | fo Fi     | MEO                |         |   |       |             |       |              |       |     |        | 800   | 800   | 820 | 18  | 800 | 800   | 150   | 750 7  | 740              |                  |             |      |                 |             |   |
| P E        | MEO                |           |  |               |           |           | 160     | 270    | 340   |       | 400   |                 | 430        |          |               |            |          | 290   |               | 0.1   |             |                  |                 |           |    | fo E      | MED                |         |   |       |             |       |              | 200   | 300 | 350    | 390   | 004   | 420 | 420 | 0 4 | 410   | 390 3 | 350 3  | 300 2            | 210              |             |      |                 |             |   |
| ы<br>"£    | MED                |           |  |               |           |           | 115     | 110    | 107   | 105   | 105   | 105             |            | 105      | 5 105         | 5 105      | 5 110    | 0 112 | 2 120         | 0.74  |             |                  |                 |           | E  | ш<br>-    | MED                |         |   |       |             |       |              | 120   | 110 | 110    | 110   | 110   | 100 | 100 | 100 | 100 1 | 1000  | 1000 1 | 110 1            | 115              |             |      |                 |             |   |
| fo Es      | MEO                | 12        | 15<br>28 28  | E 27          | E 27      | E 2.6     | 27      | 26     | 34    | 540   | 25    | 23              | 233        | 23       | 3 42          | 2 40       | 256      | 32 26 | 2 26          | 6 22  | 27          | 30               | 7 14            | 13        |    | fo Es     | MEO                | 27      | E 27  | E 27  | E 27        | 2 6   | E 26         | 25    | 24  | 25     | 40 23 | 18    | 12  | 35  | 13  | 1.8   | 18    | 50     | 32               | 35 2 2 2 2       | 20 E        | E 27 | 27              | E 27        |   |
|            |                    | SWEEP     | SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION. | TO 25         | .0 MC     | N 2       | M N U   | ES. Al | UTOMA | 110 0 | PERAT | * NO 1          |            |          |               |            |          |       |               |       |             | SEPT             | SEPTEMBER, 1957 | . 1957    |    |           |                    | SWEE    | SWEEP 1.0 MC TO 13.0 MC IN 1 MINUTE 55 SECONDS. | MC T  | 0 13.0      | W.C   | N.           | TONIH | 555 | SECONO | *50   |       |     |     |     |       |       |        |                  |                  |             | SEPT | SEPTEMBER: 1957 | 195         | ~ |

| March   Marc   |          | HOUR          | fo F.2              | h' F2           | <u>u</u><br>_c | (M3000) F2 | foFi  | 10 E | w<br>E | fo Es |         | 9      |       | h' F2            | r.    | (M3000) F2 | fo Fi         |  |
|--|----------|---------------|---------------------|-----------------|----------------|------------|-------|------|--------|-------|---------|--------|-------|------------------|-------|------------|---------------|--|
| 14   15   15   15   15   15   15   15  | -        |               |                     | CONTRO          |                | CONT       | OM T  | MED  | MED    |       | 6       | 2      |       | CNE              |       | CNT        | MED           |  |
| 1941      | AHANR    | П             |                     |                 |                |            |       |      |        |       | ,       | DAKAR  | 1     |                  |       | 2 10       |               |  |
| 1941      | ASSET    |               |                     |                 |                |            |       |      |        | 0.    | ė.      | FREN   | 282   |                  |       |            |               |  |
| 1941      | # P      |               |                     |                 |                |            |       |      |        | -     |         | ČH K   | 4.6   |                  |       |            |               |  |
| 1941      | M H M    |               | 16                  |                 |                |            | -     | ш    | ш      | 0     |         | AFR    |       |                  |       |            |               |  |
| 1941      | 44<br>C: |               |                     | 24              |                |            | 2     | ~    | N      |       | :       | 2 2    |       |                  |       |            |               |  |
| 1941      | 3        |               |                     |                 |                |            |       |      |        |       |         | 4 .8N+ | , and |                  |       |            |               |  |
| 1941      | 22.8N    |               |                     |                 |                |            |       |      |        |       |         | 17.4   | 1     | 2 C              |       |            |               |  |
| 1941      | 5.56     | Н             |                     |                 |                |            |       |      |        | -     |         | _  -   | + ·   | 2 C              |       |            |               |  |
| 144   14   14   14   14   14   14   1  |          |               |                     |                 |                |            |       |      |        |       |         |        |       | 1 2:0            |       |            |               |  |
|  | 1        |               |                     |                 |                |            | 20 72 |      |        |       | 1       |        |       | 20 05            |       |            | 24            |  |
|  | MBLE 6   |               |                     |                 |                |            | 2 70  |      |        |       | (BLE 7  |        | 1     |                  |       |            |               |  |
| 1  | -        | -             |                     |                 |                |            |       |      |        | 1     | =       | -      |       |                  |       |            | 0,-           |  |
| 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,   |          |               |                     |                 |                |            |       |      |        |       |         |        |       |                  |       |            | 200           |  |
| This case   Contact    |          |               |                     |                 |                |            |       |      |        |       |         |        | 1     |                  |       |            | 0.6           |  |
|  |          |               |                     |                 |                |            |       |      |        |       |         |        |       |                  |       | 1 2 2      |               |  |
|  | -        | -             |                     |                 |                |            |       |      |        |       |         | -      | +     |                  |       |            |               |  |
| 11-16   C   C   C   C   C   C   C   C   C  |          |               |                     |                 |                |            | 200   |      |        | 1     |         |        |       | 0 %              |       |            |               |  |
| THE CASE    |          | - 1           |                     | 0,1             |                |            |       |      | }      |       |         |        |       |                  |       |            |               |  |
| THE CALL    |          | 8             | 0<br>14<br>17<br>17 |                 |                |            |       |      | - a    | "     |         |        |       |                  |       |            |               |  |
| The Color  | -        | 20            | 344                 |                 |                |            |       |      |        | 0     |         | -      | +     |                  |       |            |               |  |
| Fig. 20   Fig.   |          | 15            | 0 0 0               |                 |                |            |       |      |        |       |         |        |       |                  |       |            |               |  |
| Foreign  |          | 22            | 2 14<br>8 1         |                 |                |            |       |      |        | _     | i       |        | 1     |                  |       | 2 C        |               |  |
| Foreign  |          |               |                     |                 |                |            |       |      |        |       |         | ME 0.  |       |                  |       | 100        |               |  |
| THE COMPANY INCIDENT (19 CON 1. TO 1. OLD 1. | ۰. ۲     |               | 01-                 |                 | 0.00           |            |       |      | Γ      |       |         | 。      | J     |                  | 2.5   |            |               |  |
| THE COMPANY INCIDENT (19 CON 1. TO 1. OLD 1. |          |               | \$<br>7             | Ē               | 'E             | [W]        | 9 0   | fo E | -E     | 10 E  |         |        | \$    | Ē                |       | €          | fo f          |  |
| Table  |          | HOUR          | 2                   | -2              |                | \$000)F2   |       | 1.4  | 1+1    | jā.   |         | HOILE  | 2     | 52               | le.   | 3000) F.   | . <del></del> |  |
| ### SPANIA I 194-004-72-46.    Octoor   |          |               | CNT                 | CNT<br>CO<br>LO | MER            |            | MED   | MED  | MED    | CNT   |         | _      |       | MEC<br>CNT<br>UD | CNT   | ļ          | MED           |  |
| TABLE TO SECOND  | BOME     | 8             | 0.00                | 01.55           | 0.50           |            |       | 6.   |        | 6:    |         | MAD    |       | 0.5              | 0) 2- |            |               |  |
| TABLE TO SECOND  | 9A7 e    |               |                     |                 |                |            |       |      |        |       |         | ORAS . |       |                  |       |            |               |  |
| TABLE TO SECOND  | ALONI    | 8             |                     |                 |                |            |       |      |        |       |         | 1NDIA  |       |                  |       |            |               |  |
| TABLE TO SECOND  | 119.     |               |                     |                 |                |            |       |      |        |       |         | 03     | 200   |                  |       |            |               |  |
| TABLE TO SECOND  | ON. 7    | $\rightarrow$ |                     |                 |                |            | ļ .   |      |        |       |         | 1N.    |       | _                |       |            |               |  |
| TABLE 11  126 25 26 26 26 17 20 11 12 13 14 13 16 15 19 16 17 18 19 10 12 11 19 10 10 10 10 10 10 10 10 10 10 10 10 10   | 2.86.    |               |                     |                 |                |            |       |      |        |       |         | 80.3E  |       |                  |       |            |               |  |
| 12   12   13   14   15   15   17   18   19   10   10   10   10   10   10   10  |          |               | 74                  |                 |                | 325        |       |      |        |       |         | _ [    |       |                  |       |            |               |  |
| 12   12   13   14   15   15   17   18   19   10   10   10   10   10   10   10  |          |               |                     |                 |                |            |       |      |        |       |         | - 1    |       |                  |       |            |               |  |
| 12   12   13   14   15   15   17   18   19   10   10   10   10   10   10   10  | F        | -             |                     |                 |                |            |       |      |        |       |         | -      |       |                  |       |            |               |  |
| 12   12   13   14   15   15   17   18   19   10   10   10   10   10   10   10  |          |               |                     |                 |                |            |       |      |        |       |         | - 1    | 1     |                  |       |            |               |  |
| 12   12   13   14   15   15   17   18   19   10   10   10   10   10   10   10  |          |               |                     |                 |                |            |       |      |        |       | ⊤<br> A |        |       |                  |       |            |               |  |
| 13   | 916      |               |                     |                 |                |            |       |      |        |       | BLE 7.  |        | 1     |                  |       | 9 22       |               |  |
| 13   14   15   16   17   18   19   10   10   10   10   10   10   10  |          | +             |                     |                 |                |            |       |      |        |       | ~       | -      |       |                  |       |            |               |  |
| 14   15   16   17   16   19   20   21   12   11   12   12   12   12  |          |               |                     |                 |                |            |       |      |        |       |         |        | 1     |                  |       | 1 21       |               |  |
| 15 16 17 18 19 22 114 109 109 109 109 109 109 109 109 109 109  | -        |               |                     |                 |                |            |       |      |        |       |         |        | 1     |                  |       |            |               |  |
| 115 130 132 114 109 103 12 114 109 103 12 130 132 114 109 103 12 130 132 114 109 103 130 132 130 132 130 130 130 130 130 130 130 130 130 130   |          | 1             |                     |                 |                |            |       |      |        |       |         |        |       |                  |       |            |               |  |
| 15   | -        | +             |                     |                 |                |            |       |      |        |       |         | -      |       |                  |       | 0.00       |               |  |
| 12   11   10   10   10   10   10   10  |          |               |                     |                 |                |            |       |      |        |       |         |        | 1     |                  |       |            |               |  |
| SEPTE  |          |               |                     |                 |                |            |       |      |        |       |         |        |       |                  |       |            |               |  |
| SEPTE 20 21 12 20 21 20 21 12 20 21 20 21 12 20 21 12 20 21 12 20 21 12 20 20 20 20 20 20 20 20 20 20 20 20 20  |          | 1             |                     |                 |                |            |       |      |        |       |         |        |       |                  |       |            |               |  |
| 2 2 1 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  | -        | +             |                     |                 |                |            |       | -    |        |       |         | -      |       |                  |       |            |               |  |
| 1 1 1 H E  |          |               |                     |                 |                |            |       |      |        |       |         |        |       |                  |       |            |               |  |
|  | 7.1ME    | 23            | 100                 |                 |                | 305        |       |      |        |       | 1<br>1  | 71ME   | 2     |                  |       | ~ '        |               |  |

SEPTEMBER. 1957

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES. MANUAL OPERATION.

MED CNT

MEO

fo Es

4 6

1 8

1 4 8

9 9

4.7

SWEEP 1.25 MC TO 20.0 MC IM 10 MINUTES.

| 10 12 12 12 12 12 12 12 12 12 12 12 12 12                   | 19   19   19   19   19   19   19   19  | 255 425 520 200 200 100 100 100 100 100 100 100 1    |
|---|--|--|
| 10 17 18 19 17 10 17 19 19 19 19 19 19 19 19 19 19 19 19 19 | 13   14   15   16   17   18   19     13   14   15   16   17   18   19     13   13   13   13   13   13   13 | 15   16   17   18   19   19   19   19   19   19   19 |
|   | 100 100 100 100 100 100 100 100 100 100  |  |

TABLE 74

|                            | 7     | TANANARIVE. MADAGASCAR (18.85. 47.5E) | I v E +         | MADA      | GASCA    | R (16    | . 85                               | 47.5E    | 100      |       |        |       |       |       |                |                |       |       |           |        |                   |           | -     | TIME 45.0E       | 0E  |            |                    | OECE       | 0ECEPC1 DN    | -          | (63.05+ 60+7W) | . 60 .        | (A)   |                                      |       |          |               |       |          |       |                                       |          |          |               |   |       |               |        | TIME           | 00    | ĕ      |
|----------------------------|-------|---------------------------------------|-----------------|-----------|----------|----------|------------------------------------|----------|----------|-------|--------|-------|-------|-------|----------------|----------------|-------|-------|-----------|--------|-------------------|-----------|-------|------------------|-----|------------|--------------------|------------|---------------|------------|----------------|---------------|-------|--------------------------------------|-------|----------|---------------|-------|----------|-------|---------------------------------------|----------|----------|---------------|---|-------|---------------|--------|----------------|-------|--------|
| 8                          |       | ō                                     | 8               | 2 03      | 8        | 1        | 8                                  | 8        | 0 20     | 80    | 60     | 0     | H     | 2     | 50             | 4              | 91    | 9     | 17        | 9      | 6                 | 2         | 21 2  | 22 23            | _   | HOUR       |                    | 8          | ō             | 8          | 03             | g             | 0.5   | 8                                    | 02    | 80       | 60            | 0     | =        | 2     | 0                                     | 4        | 0        | 91            | 17                                      | 91    | 6             | 20 21  | 55             | 1     | 23     |
| MEO 77<br>CNT 26<br>UQ     |       | 70                                    |                 | 52.2      | 52       | 27       | 4.00                               | 75 23    | 2 %      | 900   |        |       |       |       |                |                |       |       | 98        |        | 20 4              | 6.4       | 111   | 0<br>88<br>11 2: | 88  | fo F2      | CNT                | 270        | 2.40          | 2.5        | 25             | 7 8 7 8 9     | 2.7   | 28                                   | 22    | 27       | 5 8 9         | 119   | 29       | 30    | 30                                    | 30       | 106      | 9.6           | 2 8 8                                   | 30    | 30            | 70 28  | 28 2           | 27 2  | 2 9 8  |
| MEO                        |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       | 350            | 980            | 920   |       |           |        |                   |           |       |                  |     | h. F2      | MEO<br>CNT<br>UO   |            |               |            |                |               |       |                                      |       | 205      | 0<br>220<br>5 | 210   | 500      | 200   | 210                                   | 230      |          | 185           |   |       |               |        |                |       |        |
| MED 230<br>CNT 28<br>UQ LQ | 6.01  | 0 230                                 |                 | 225 225 2 | 230 24   | 248 2    | 252 2                              | 240 2    | 230 2    | 225   | 12 12  | 210   | 200   | 215   | 200            | 210            | 225   | 230   | 242 26    | 245 28 | 235 2             | 228 2     | 230 2 | 240 230 27       |     | lu<br>Če   | MEO                | 280        | 290           | 280        | 280            | 270           | 225   | 200                                  | 180   | 27       | 26            | 180   | 175      | 30    | 30                                    | 30       | 185      | 180           | 180                                     | 30    | 30 2          | 200 2  | 205 24         | 240 2 | 270 29 |
| WEO 30                     | 0.0   | 300 290 22 19                         |                 | 285 2     | 290 24   | 285 2    | 290 3                              | 318 3    | 328      | 315   |        |       |       |       |                |                |       |       | 315       |        | 312 3             | 3 210 2   | 295   | 282 302          | 9.4 | (M3000)F2  | 2 MEO<br>CNT<br>UQ | 290        | 290           | 290        | 290            | 290           | 310   | 360                                  | 370   | 370      | 370           | 370   | 370      | 370   | 370                                   | 370      | 370      | 370           | 370                                     | 360 3 | 360 3         | 350 3. | 320 31         | 310 2 | 290    |
| MEO                        |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       | 770            |                |       |       |           |        |                   |           |       |                  |     | 10 F1      | MEO                |            |               |            |                |               |       |                                      |       |          | 360           | 450   | 360      |       | 500                                   |          |          |               |   |       |               |        |                |       |        |
| MEO                        |       | я в                                   | B 6             | 2         |          | ~        | - 00                               | 158 2    | 280      |       | 390    |       |       |       |                |                | 350   | 330   | 268       | 077    |                   | ] "       |       | 3 L              |     | 10 E       | MEO                | u.         | w             | ш -        | E L            | П 4           | п 3   | m<br>Ø                               | ш     | 270      |               |       | 370      |       |                                       | 300      | 290      |               | m<br>ø                                  | 1.6   |               | 130    | ш              | -     |        |
| MEO<br>CNT                 |       | 8 8                                   | ω <sup>-1</sup> |           | ш        | 12 E     |                                    |          |          | 105   | 105    | 102   | 001   | 001   | 102            | 105            | 105   |       | 115       |        | w                 |           |       | e e              | •   | ш<br>/г    | MEO                | -          | -             | -          | -              | -3            |       | 6 B                                  | 20    | 6.0      |               |       |          |       |                                       | 9.6      | 0 -1     |               |   | 99    | 0,0           | 99     | 99             | -     |        |
| MEO E                      |       | E E 29                                |                 | 5.6       | 60       | 17       | 5.0                                | 28       | 2.8      | 31 6  | 2,2    |       |       |       |                |                | 6,7   | 34    | 9.7       | 30     | 28                | 0 9       | *     | E E 29           |     | fo Es      | MEO                | 27         | 27            | 52         | £ 26           | E 28          | E 25  | E 26                                 | E 22  | 27<br>21 | 19            |       | 37<br>13 | 10    | 16                                    | 30<br>18 | 29<br>20 | E 22          | E 25                                    | 29 67 | 27            | 82     |                | P 5   | 28     |
| , Le                       | 8 0   | CANBERRA, AUSTRALIA 135,35, 149,0E)   | A . AU          | USTRAL I  | LIA -    | 35+35    | 149                                | 49.0E)   | 20       | 80    | 8      | TABLE | 0.    | 2     | 9              | 4              | 10    | 2     | 2         | 0.0    |                   | 2         | 1 2   | 71ME 150.0E      | ے ق | HOUR       |                    | CANB<br>00 | O OI          | AUST<br>02 | RALIA          | (35.          | 35. 3 | CANBERRA, AUSTRALIA 135.35. 149.0E.) | 6     | 8        | 8             | TABLE | 9 =      | 2     | ū                                     | 4        | 40       | 9(            | Ē                                       | 89    | 6             | 20 2   | 71ME           | 5     | 0+0E   |
| Ļ                          | s L   | П                                     | 2               | - 1       |          | 1        |                                    | 2        | -        | 3     | - 1    |       |       |       |                | - 1            |       |       |           |        |                   |           |       |                  |     |            |                    | 3          |               | :          | 3              |               |       |                                      |       |          | 3             |       |          |       |                                       |          | 1        |               |   |       |               |        |                |       | T      |
| CNT 29                     |       | 9 29                                  | 000             | 27        | 27       | 0 0 0 28 | 0 0 0 0 0 0                        | 65 27    | 95 27 27 | 90 0  | 105    | 28    | 110   | 110   | 0<br>108<br>26 | 0<br>102<br>28 | 29    | 30    | 30        | 30 30  | 300               | 0 0 0 0 0 | 80 24 | 78 75<br>28 29   | 20  | 10 F 2     | MEO<br>CNT<br>UO   | 100        | 0<br>75<br>10 | 7 5        | 5 8            | 0 0 0 0 0 0   | 090   | 0 0 0                                | 0 2 0 | 80 80    | 105           | 100   | 101      | 107   | 105                                   | 9.6      | Ø 00     | 0<br>92<br>11 | 110                                     | 100   | 0 8 5 7 1 0 0 | 0 00 0 | 0 0 0 0        | 0 0 0 | 0 4 6  |
| 0 K Q Q                    |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       |                |                |       |       |           |        |                   |           |       |                  |     | h' F2      | MEO<br>CNT<br>UQ   |            |               |            |                |               |       |                                      | -4    | ~        | 2             | 380   | 000      | 390   | 370                                   | 360      | ~        | 4             |   |       |               |        |                |       |        |
| MED CONT                   | FN    | 270 280<br>20 23                      |                 | 275 26    | 260 2    | 280 2 29 | 270 24                             | 260 2    | 230 2    | 220 2 | 210 28 | 200 2 | 200   | 210   | 210            | 210            | 210   | 220   | 30        | 300    | 300,2             | 240 2     | 250 2 | 280 290 23       |     | E.         | MEO<br>CNT<br>UO   | 265        | 290           | 255        | 300            | 300           | 300   | 270                                  | 235   | 230      | 3             | 215   | 220      | 210   | 230                                   | 220      | 210      | 220           | 240                                     | 250   | 2 5 9 2       | 290 2  | 290 29         | 290 2 | 290    |
| CONT<br>CONT<br>CONT       |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       |                |                |       |       |           |        |                   |           |       |                  |     | (M3000) F2 | 2 MEO<br>CNT<br>UQ | -          | eri,          | 255        | m              | 240           | 4     | 4                                    | 9     | 270      | 4             | 265   | 10       | 250   | 255                                   | 260      | 260      | 250           | 255                                     | 260   | е.            | ~      |                | m '   | m      |
| MEO                        |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       |                |                |       |       |           |        |                   |           |       |                  |     | fo Fi      | MEO                |            |               |            |                |               |       |                                      | -     | PI       | ~             | J     | 630      | 610   | 4                                     | 610      | 7        | 6             |   |       |               |        |                |       |        |
| MED                        |       |                                       |                 |           |          |          | ~ .                                | 270 2    | 260 3    | 315 3 | 340    | 370   | 380   | 370   | 380            | 380            | 370   | 335   | 290       | 210    |                   |           |       |                  |     | 3 02       | MED                |            |               |            |                |               | ~     | 215                                  | 285   | 330      | 370           | 380   | 004      | 410   | 415                                   | 410      | 390      | 370           | 320                                     | 260 1 | 170           |        |                |       |        |
| ME0<br>CNT                 |       |                                       |                 |           |          |          |                                    |          |          |       |        |       |       |       |                |                |       |       |           |        |                   |           |       |                  | !   | h.<br>E    | MED                |            |               |            |                |               |       |                                      |       |          |               |       |          |       |                                       |          |          |               |   |       |               |        |                |       |        |
| MED                        | 2. 5. | 26 10<br>29 29                        | 0 10<br>9 28    |           | 10<br>28 | E E E 29 | E E E 27                           | E E E 29 | 26<br>29 | 33    | 37     | 300   | 0 6 7 | 41 29 | 38 26          | 28<br>28       | 37 28 | 34 29 | 2.9<br>30 | 30     | 100<br>300<br>300 | 10<br>29  | E E E | E E E 29 29      | 10  | to Es      | MEO                | 38         | 36            | 33         | 28             | 30            | 30    | 28                                   | 80    | 86       | 4 ~           | 10    | 12       | E 4 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | E 4 1    | 9 9      | 38            | 3 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 35    | 32            | 10     | 35             | 50.00 | 28     |
| 55                         |       | SWEEP 1.0                             | ¥               | 101       | 0.9      | AC IN    | TO 16.0 MC IN 1 MINUTE 55 SECONOS. | NOTE     | 55 SE    | CONOS |        |       |       |       |                |                |       |       |           |        |                   |           | N A   | MARCH. 1957      | 5.  |            |                    | 3          | SWEEP 1.0     | 0 MG       | 10 16          | MC TO 16.0 MC |       | IN 1 MINUTE 55                       | TE 55 | - NONO   | 90            |       |          |       |                                       |          |          |               |   |       |               | "      | FEBRUARY. 1957 | . 1   | 756    |

|            |                        | :               | - 1        |        |             | 1        | -                                  |          | ŀ                   |        |               | -             | +      | 1             |               |            | ŀ          |        |   |        | ŀ           | 1        | 1        | ı             |      |            |                          |           |          | - 1     |                    | - 1       | 1     |              | - 1   | ŀ                       | 1                                       | -     |        | 1                    |           | 1     | 1            | +     | 1     | 1      | 1     | - 1     |       |             |       |
|------------|------------------------|-----------------|------------|--------|-------------|----------|------------------------------------|----------|---------------------|--------|---------------|---------------|--------|---------------|---------------|------------|------------|--------|---|--------|-------------|----------|----------|---------------|------|------------|--------------------------|-----------|----------|---------|--------------------|-----------|-------|--------------|-------|-------------------------|---|-------|--------|----------------------|-----------|-------|--------------|-------|-------|--------|-------|---------|-------|-------------|-------|
| MOUR       |                        | 8               | 5          | 8      | 8           | 8        | 8                                  | 04       | 8                   | 8      | -             | =  <br>o      | +      | 2             | 2             | 4          | 2          | 9      | -                                       | 9      | 6           | 202      | 2        | 22 23         |      | HOUR       |                          | 00        |          | 8       |                    | 8         | - 1   |              | 04    | 80                      | 60                                      | 0     | =      | 2                    | 2         | 4     | 0            | و     |       |        | - 1   | -       |       | 8           | 2     |
| 10 F 2     | CNT                    | 35              | 33         | 30     | 28 2        | 28 3     | 39 5                               | 21 24    | 4 26                |        | 27 2          | 26 2          | 26 2   | 75 7          | 26 2          | 26         | 276        | 272    | 26 2                                    | 2 4 2  | 26 4 2      | 25 2     | 24 2     | 45 4          | 240  | to F2      | MEO<br>CNT<br>UO         | 23        | 26       | 23      | 23                 | 23        | 212   | 27 27 21 21  | 78    | 20                      | 17                                      | 21    | 19     | 53                   | 56        | 2 8 2 | 270          | 288   | 27    | 2 4 2  | 255   | 2 2 2 2 | 2 4 5 | 2 2 2 3     | 28.5  |
| h' F2      | MEG<br>CNT<br>UQ<br>LQ |                 |            |        |             |          | 550                                | 7 14     | 2<br>520<br>4<br>18 | 8 23   | 3 22          | 10 500        | _      | 21 2          | 480 48        | 21 480     | 4,60       | 18 450 | 425                                     |        |             |          |          |               |      | h' F2      | MEO<br>CNT<br>UD         |           |          |         |                    |           |       |              | 530   | 430<br>10               | 430                                     | 100   | 450    | 21                   | 44.5      | 450   | 455          | 5 450 | 9 8   | ~      |       |         |       |             |       |
| -E         | CNE                    | 300 3           | 332 3      | 320 34 | 345 35      | 350 31   | 316 262                            | 242 242  | 2 230               |        | 220 215 25 24 | 24 20         |        | 210 22        | 220 23        | 210 21     | 215 22     | 220 22 | 235 24                                  | 20 25  | 250 25      | 250 25   | 250 25   | 250 270 16 15 |      | ш<br>Те    | MEO<br>CNT<br>UQ         | 300       | 300      | 300     | 310                | 310       | 310   | 260          | 240   | 10                      | 230                                     | 220   | 230    | 235                  | 230       | 230   | 230          | 240   | 250   | 255    | 295   | 295     | 300   | 320         | 310   |
| (M3000) F2 | CNT                    | 250 2           | 250 2      | 260 25 | 250 24      | 245 25   | 252 255                            | 9 23     | 3 24                |        | 245 235 23    | 23 235 235    |        | 235 24        | 245 25        | 250 25     | 250 26     | 260 27 | 270 28                                  | 285 29 | 298 29      | 295 28   | 248 27   | 278 270 24 23 |      | (M 3000)F2 | CNT                      | 250       | 250      | 240     | > 0<br>4<br>5<br>5 | 33        | 255   | 275          | 19    | 260                     | 250                                     | 245   | 240    | 240                  | 240       | 240   | 245          | 2 50  | 260   | 250    | 260   | 245     | 235   | 230         | 4     |
| fo F i     | MEG                    |                 |            |        |             | 3,6      | 300 360<br>2 8                     | 0 450    | 0 480               | 0 500  | 0 520         | 20 520        | _      | 530 54        | 540 54        | 23 52      | 530        | 510 49 | 064                                     |        |             |          |          |               |      | fo F.I     | MEG                      |           |          |         |                    |           |       |              | 100   | 960                     | 620                                     | 620   | 040    | 18                   | 075       | 0 630 | 0 000        | 9 600 | 520   | -      |       |         |       |             |       |
| fo E       | MEG                    | 7               | 125<br>125 |        |             | 7.7      | 142 230<br>8 20                    | 275      | 5 320               | 0 350  | 3 19          | 9 380         |        | 390 40        | 400 37        | 378 37     | 370 34     | 345 31 | 315 27                                  | 270 20 | 200 13      | 135      | 24       | 100 130       |      | fo E       | MEO                      |           |          |         |                    |           | 170   | 250          | 320   | 360                     | 380                                     | 12    | 405    | 410                  | 064       | 1700  | 390          | 22 22 | 345   | 280 23 | 190   |         |       |             |       |
| ٦.<br>ت    | CNT                    | H 1             | 140 E      | Е      | ш           | -        | 5 105                              | 2 17     | 5 105               |        | 20 2          | 102 105       |        | 20 10         | 21 2          | 100 10     | 100 102 22 | 105 10 | 22 10                                   | 05 10  | 105 13      | 132      | ω        | 3 140         |      | e<br>E     | CNT                      |           |          |         |                    |           |       |              |       |                         |   |       |        |                      |           |       |              |       |       |        |       |         |       |             |       |
| fo Es      | MEO                    | 100             | 15         | 15     | 24 4        | 147      | 31 23                              | 23       | 3 25                | ľ      | 20 2          | 20 2          | 26 2   | 41<br>24<br>2 | 0 07          | 92         | 92         | 5.0    | 7.2                                     | 242    | 23 1        | 15 2     | 32 2     | 23 1 23 1     | 115  | fo Es      | MEO<br>CNT               | 38        | 3.6      | 35      | 28                 | 23        | 32    | 30           | 240   | 23                      | 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | 24    | 59     | 23                   | 5 7 7 9 9 | 2 27  | 5 44         | 8 27  | 2 28  | 1 43   | 272   | 38      | 27    | 27          | 38    |
|            |                        | KERGUELEN       |            | 1, (49 | 7 -549670   | 70,3E1   |                                    |          |                     |        | <b>⊥</b>      | TABLE 8       | 69     |               |               |            |            |        |   |        |             |          | î        | TIME 75.0E    | 0.E  |            |                          | CANBE     | CANBERRA |         | AUSTRALLA          |           |       | 35.35.349.05 | 630   |                         |   | TABLE | 1 E 84 |                      |           |       |              |       |       |        |       |         | -     | TIME 150.0E | 50.06 |
| HQUR       |                        | 00              | ō          | 05 0   | 03          | 04 05    | 90 \$                              | 6 07     | 80                  | 8      | 0             | =             | -      | 12 13         | 5             | 4          | 5          | 19     | 1                                       | 80     | 61          | 20 21    |          | 22 23         |      | HOUR       |                          | 00        | ō        |         | 03                 |           | 90    | 90           | 07    | 8                       | 60                                      | 0     | =      | 12                   | 5         | 4     | 5            | 9     | - 7   | 8      | 6     |         | 5     | 22          | 23    |
| fo F.2     | CNT                    | 0 0 7 7 0 7 0 7 | 38         | 35     | 18 1        | 18 2     | 22 22                              | 27 27 24 | 28 2 28             | 7 58 7 | 288 2         | 25 2          | 28 2   | 74 7          | 28 2          | 28 2 8 8 2 | 30         | 28 28  | 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | 50 00  | 9.0         | 290      | 255      | 26 2          | 24.6 | fo F.2     | CNTC                     | 0 80 72 5 | 255      | 255     | 0 25 25            | 0 2 4 5 5 | 58.50 | 25 25        | 0 78  | 23                      | 21                                      | 500   | 25     | 288                  | 300       | 2 89  | 9 88         | 7 29  | 9 28  | 9 27   | 0 82  | 0 80 53 | 809   | 0 82 74 7   | 0 80  |
| h' F2      | MEG<br>CNT<br>UQ<br>LQ |                 |            |        |             | 2 0      | 545 505<br>2 14                    | 50 8 20  | 9 545               |        | 542 54        | 545 568 22 28 |        | 550 54        | 26 55<br>26 2 | 27 54      | 28 5       | 515 4  | 18 45                                   | 6 6 6  |             |          |          |               |      | h'F2       | MEO<br>CNT<br>CNT<br>CNT |           |          |         |                    |           | -     | 4            | 490   | 125                     | 170                                     | 450   | 24     | 7 60<br>7 80<br>7 80 | 2 450     | 2 2 8 | 5 450        | 4 27  | 7 15  | 2.0    |       |         |       |             |       |
| r.         | CNT<br>CNT<br>COT      | 325 3           | 322 3      | 345    | 352 35      | 35.2 29  | 295 252 25                         | 22 245   | 5 235               |        | 225 22        | 220 20        | 205 24 | 240 22        | 220 22        | 225 22     | 220 22     | 225 22 | 235 25                                  | 250 25 | 250 27      | 275 27   | 272 28   | 280 29        | 500  | Ē.         | CNT                      | 300       | 300      | 300     | 31.0               | 320       | 300   | 250          | 1 14  | 230                     | 230                                     | 220   | 220    | 220                  | 2 230     | 230   | 0 200        | 0 240 | 1 17  | 7 10   | 290   | 300     | 300   | 300         | 310   |
| (M3000) F2 | MEO<br>CNT<br>LO       | 250 2           | 248 2      | 240 24 | 13 24       | 245 25   | 250 235                            | 15 240   | 5 25 5              | 5 225  | 5 225         | 25 220        |        | 220 22        | 225 22        | 225 22     | 225 22     | 225 22 | 248 26 26 26                            | 268 27 | 275 28 28 2 | 280 27   | 275 27   | 270 262 25 22 |      | (M3000) F2 | MEO<br>CNT<br>UO         | 245       | 240      | -3      | 230<br>10          | 230       | 240   | 250          | 7 18  | 240                     | 235                                     | 235   | 230    | 230                  | 230       | 230   | 9 240        | 235   | 2 240 | 0 245  | 250   | 4       | 230   | 240         | 240   |
| fo F I     | MEO                    |                 |            |        |             | 36       | 380 440                            | 9 25     | 5 27                |        | 0 540         |               |        |               | 560 56        | 560 55     | 30 5       | 540 50 | 19 48                                   | 96 984 | 350         |          |          |               |      | fo F I     | MEG                      |           |          |         |                    |           | -     | 1            | 9 7   | 580                     | 620                                     | 630   | 0 640  | 520                  | 0 630     | 0 630 | 0 620        | 0 580 | 0 550 | 0.71   |       |         |       |             |       |
| fo E       | CNT                    | 125             | -          |        | o≒<br>      | 3 170 22 | 220 270                            | 0 320    | 3 24                |        | 390 40        | 18 22         | 8 428  |               | 20 40         | 12 40      | 15         | 350 34 | 340 30                                  | 22 25  | 250 15      | 155 9    | 0.4      |               |      | fo E       | MEO                      |           |          |         |                    |           | 190   | 275          | 5 330 | 370                     | 400                                     | 007   | 410    | 410                  | 0 415     | 5 410 | 0 400        | 3 25  | 0 345 | 5 280  | E 160 |         |       |             |       |
| h, E       | ONTO                   | ш               | ٦.         |        | 57          | 120 10   | 9 17                               | 7 23     | 3 25                | 0 100  |               | 23 25         | 100    |               | 100 10        | 20 10      | 100 10     | 100 10 | 20 10                                   | 19 10  | 100 10      | 105<br>6 | н        |               |      | ъ.<br>Н    | MEO                      |           |          |         |                    |           |       |              |       |                         |   |       |        |                      |           |       |              |       |       |        |       |         |       |             |       |
| fo Es      | MEO                    | 32              | 00         | 38     | 10 1        | 31 2     | 21 24 26                           | 6 25     | 5 26                |        | .0            | 26 2          | 50 5   | 51 4          | 29 2          | 28         | 5 6 5      | 50 7   | 36 27 2                                 | 34 3   | 30 3        | 34 3     | 33 3     | 30 3          | 32   | to Es      | MEO                      | 33        | 25       | 30      | 27                 | E 10      | 222   | 2 35         | 5 42  | 2,1                     | 24                                      | 5 68  | 26     | 28                   | 290       | 0 43  | 3 40<br>8 25 | 30 42 | 2 45  | 5 45   | 27    | 27      | 2.7   | 1 9         | 36    |
|            |                        | SWEEP           | 0.88 MC    |        | TO 14+14 MC |          | IN 10 MINUTES, AUTOMATIC OPERATION | MINUT    | ES. A               | UTOMA  | 1110          | PERAT         | .No.   |               |               |            |            |        |   |        |             |          | JANUARY. | RY+ 1957      | ] %  |            |                          | SWEEP     | EP 1.0   | 0 MC T0 | To 16              | 16.0 MC   | 2     | M I M        | UTE S | IN 1 MINUTE SS SECONDS. | >NO S .                                 |       |        |                      |           |       |              |       |       |        |       |         | DECE  | DECEMBER.   | 1956  |

TIME 150.0E

TABLE 82

CANBERRA, AUSTRALÍA (35,35, 149,0E)

TIME 75.0E

TABLE 81

KERGUELEN 1. (49.45. 70.3E)

| 23             | 72 2 2 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |                  | 285                | 260<br>28<br>265<br>255                    |        |        |       | E 28                                    | LOCAL  | 23       | 68<br>74<br>59                              |           | 300      | 260<br>265<br>265<br>248               |           |       |       |    |
|----------------|--|------------------|--------------------|--|--------|--------|-------|---|--|----------|---|-----------|----------|--|-----------|-------|-------|----|
| 22             | 78<br>28<br>80<br>74                     |                  | 268                | 265 250 250 250 250 250 250 250 250 250 25 |        |        |       | 22 26                                   |  |          | 70<br>26<br>74<br>62                        |           | 275      | 260<br>25<br>270<br>252                |           |       |       | l. |
| 2              | 90 28 44 74                              |                  | 250 2              | 275 2<br>280 2<br>270 2                    |        |        |       | 25                                      | E  | 12       | 76<br>27<br>79<br>71                        |           | 250 25   | 272<br>280<br>280<br>265               |           |       |       | [  |
| 20 2           | 1000                                     |                  | 260 2              | 285 2<br>29 2<br>298 2<br>280 2            |        |        |       | 29                                      |  | 50       | 8.2<br>2.9<br>8.0<br>8.0                    |           | 250 2    | 280 2<br>27<br>290 2<br>270 2          |           |       |       | ı  |
| 19             |  | 0.0              |                    |  |        | 2.5    | 117   | 333                                     |  | 61       | 0<br>28<br>28<br>44<br>87                   |           | 248 2    | 290 2<br>24<br>300 2<br>285 2          |           | ~     |       | 1  |
|                | 277                                      | 280              | 255                | 5 285<br>8 27<br>0 295<br>8 280            | v. 00  | 5 21   |       | 30 2                                    |  | 1 8      | 29<br>29<br>98<br>89                        |           |          |  |           | 0 11  | 0-1   |    |
| 60             | 29 84                                    | 308              | 230                | 285 285 290 278                            | 507    | 270    | 5 110 |   |  |          |   |           | 5 250    | 5 290<br>8 21<br>0 295<br>0 278        |           | 9 219 | 0 120 |    |
| (7)            | 77 26 85                                 | 330              | 230                | 282<br>24<br>292<br>272                    | 1480   | 311    | 105   | 27                                      |  | 17       | 0     | 272       | 245      | 285<br>18<br>290<br>280                | 7         | 279   | 110   |    |
| 9              | 28<br>28<br>82<br>69                     | 355              | 218                | 275<br>27<br>285<br>285<br>265             | 500    | 336    | 104   | 35                                      |  | 9        | 97<br>102<br>90                             | 270       | 240      | 285<br>26<br>290<br>290<br>280         |           | 326   | 109   | +  |
| Ē.             | 27 27 83                                 | 350              | 215                | 275<br>27<br>285<br>265                    | 520    | 350    | 102   | 36                                      |  | 5        | 0 96<br>300<br>102                          | 305       | 232      | 285<br>290<br>290<br>275               | 900       | 345   | 107   | 1  |
| 2              | 78 27 71                                 | 358              | 210                | 278<br>26<br>285<br>260<br>260             | 540    | 361    | 102   | 38                                      |  | 4        | 98<br>30<br>107<br>92                       | 310       | 230      | 280<br>26<br>285<br>270                | 535       | 358   | 105   |    |
| 50             | 7.5<br>8.3<br>7.2                        | 390              | 210                | 270<br>280<br>280<br>258                   | 550    | 370    | 102   | 39                                      |  | E        | 229   | 330       | 225      | 275<br>21<br>282<br>270                | 542       | 36.2  | 105   | -  |
| 2              | 88.89                                    | 370              | 215                | 270<br>25<br>282<br>282<br>258             | 550    | 374    | 102   | 4.3                                     |  | 2        | 9 8<br>103<br>9 1                           | 322       | 220      | 280<br>25<br>290<br>270                | 520       | 368   | 107   |    |
| =              | 25 25 70 70 70                           | 365              | 210                | 270<br>25<br>280<br>262                    | 535    | 360    | 102   | E 25                                    | 80   | =        | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0       | 320       | 220      | 265<br>22<br>285<br>260                | 530       | 368   | 104   | I  |
| 0              | 28 20 2                                  | 330              | 12                 | 270<br>25<br>288<br>288<br>258             | 530    | 362    | 23    | 3.9                                     | TABLE  | 0        | 2 8 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9     | 320       | 220      | 270<br>23<br>295<br>265                | 520       | 361   | 105   |    |
| 60             | 980                                      | 34.2             | 210                | 280<br>285<br>285<br>285                   | 510    | 2.3    | 23    | 27                                      |  | 60       | 82<br>27<br>90<br>74                        | 348       | 230      | 270<br>23<br>290<br>265                | 500       | 339   | 107   |    |
| 96             | 77<br>30<br>84<br>73                     | 33.0             | 215                | 280 290 270 270 2                          | 21     | 328    | 103   | 3.0                                     |  | 8        | 200   | 348<br>14 | 235      | 265<br>300<br>265                      | 100       | 313   | 109   | L  |
| 07             | 325                                      | 52               | 230 2              | 280 2<br>30 2<br>285 2<br>270 2            | 190    | 304 3  | 105 1 | 30                                      |  | 40       | 28 4 7 9 9 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  | 275 3     | 240 2    | 295<br>28<br>305<br>270<br>270         | 90        | 275 3 | 23    | 4  |
| 8              | 2284                                     | 22 31            | 238 2              | 280 24<br>29 29<br>29 27<br>270 2          | 425 4  | 269 3  | 108 1 | 31                                      |  | 90       | 0 0 4 6<br>0 0 4 6<br>0 3 4 6               | ~ ~       | 260 2    | 288 2<br>28 3<br>308 3<br>278 2        | ~         | 210 2 | 122 1 |    |
| 0 50           | 2004                                     | 13 2             | 23 23 2            | 270 28<br>29 2<br>280 28<br>260 27         | 365 42 | 206 26 | 24 2  | 25 3                                    | 7.8F   |          | 0 0 0 4                                     |           | 298 26   | 270 28<br>28 28<br>295 30              |           | 2     | -     |    |
|                |  |                  |                    |  | 36     | 13 2   | 12 2  | 2002                                    |  |          | 1000  |           | 27 205 2 | 250 2<br>27 2<br>260 2<br>240 2        |           | ω -   | Ψ     | 9  |
| $\vdash$       | 2000                                     | 335              | 295                | 265<br>277<br>255<br>255                   |        | u -    | 3 7   | 17 2                                    | 2<br>  | 5 04     | 4104  |           |          |  |           |       |       | ω  |
| 03             | 200                                      |                  | 285                | 260  |        |        |       |   | >-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 03       |   |           | 5 295    | 0 250<br>0 250<br>0 260<br>0 245       |           |       |       | w  |
|                | 300                                      |                  | 300                | 260<br>265<br>250                          |        |        |       | 30                                      |  |          | 2000  |           | 295      | 250                                    |           |       |       | ш  |
| ō              | 300                                      |                  | 200                | 255  |        |        |       | 30                                      |  | ō        | 262   |           | 300      | 255<br>265<br>265<br>265               |           |       |       | L  |
| 8              | 5858                                     |                  | 5,5                | 255  |        |        | 0.1   | 2.6                                     | Or<br>tu   | 8        | 2000  | 01.02     | 295      | 295                                    |           |       |       | u  |
|                | CNT                                      | ONT O            | ON CONT            | MED<br>CNT<br>UQ<br>LQ                     | MED    | MED    | MED   | MED                                     |  |          | PRS 3                                       | CNT       | CNT      | CNT                                    | MED       | MED   | MED   |    |
| HOUR           | F2                                       | F2               | li.                | M 3000)F2                                  | ū.     | ш      | ш     | fo Es                                   |  | HOUR     | fo F.2                                      | F2        | LL.      | M 30001 F2                             | fo F1     | ш     | Ш     |    |
|                | ٥  | `z               | ·c                 | €  | 2      | \$     | -E    | <u> </u>                                |  | L        | 2   | <u></u>   | TE .     | 8                                      | <u>\$</u> | \$    | `e    |    |
| 23             | 23 23                                    |                  | 300                | -3   |        |        |       | 3.8                                     | ⊳  | 23       | 273   |           | 290      | 260<br>26<br>265<br>265<br>250         |           |       |       |    |
| 22             | 90 5                                     |                  | 14                 | ~  |        |        |       | 31                                      | E LOCAL  |          | 7 P P P P P P P P P P P P P P P P P P P     |           | 280 2    | 265 2<br>27 2<br>270 2<br>255 2        |           |       |       |    |
| - 1            | 212                                      |                  | 13                 | 520  |        |        |       | 35                                      | ¥  | 2 2      | 8248  |           | 255 2    | 275 2<br>27<br>285 2<br>265 2          |           |       |       |    |
|                | 0 45                                     |                  | 290 34             | 25   |        |        |       | 37                                      |  | 20 2     | 9300  |           | 260 2    | 265 2<br>26 26<br>280 26               |           |       |       |    |
| 50             | 95                                       |                  |                    | -10  |        | 0.00   |       | 38 3                                    |  | $\vdash$ | 9536  |           |          |  |           | P     | 3     |    |
| 6              | 0  |                  | 290                | 250  |        | E 170  |       |   |  | 0        |   |           | 265      | 285 298 282                            | ~         | 187   | 0.0   |    |
| 0)             | 0 40 5 20 0                              |                  | 260                | 255  |        | 240    |       | 30                                      |  | ā        | 18 2 9 0                                    | 275       | 250      | 290<br>26<br>295<br>295<br>285         |           | 249   | 110   |    |
| -              | 982                                      | 4                | 250                | 240  | 7      | 320    |       | 33                                      |  | 1        | 984   | 295       | 240      | 25 25 290 278                          | -3        | 296   | 107   |    |
| 9              | 25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 100              | 240                | 245  | 950    | 365    |       | 39                                      |  | 9        | 31.0  | 320       | 235      | 280<br>290<br>290<br>270               |           | 334   | 104   |    |
| Ē.             | 93                                       | 160              | 230                | 240  | 580    | 390    |       | 23                                      |  | 50       | 8 4 2 5 4 5 7 3 5 7 3 5 7 3                 | 325       | 235      | 275<br>25<br>288<br>270                | 515<br>14 |       | 104   |    |
| 14             | 2 8 8 2                                  | 420              | 230                | 240  | 630    | 400    |       | 27                                      |  | 4        | 9 7 6 7 9                                   | 350       | 230      | 270 270 280 280 2865                   | 530       |       | 103   |    |
| 100            | 0 92 58                                  | 25 25            | 122                | 240  | 0.50   | 405    |       | 47                                      |  | ī        | 90 27 97 97 97                              | 352       | 215      | 275<br>27<br>280<br>280<br>265         | 540       | 1     | 104   |    |
| g              | 95                                       | 430              | 220                | 240  | 0.50   | 19     |       | 4.8                                     |  | 2        | 900   | 360       | 218      | 265<br>275<br>275<br>260               | 560       |       | 102   |    |
| -              | 0 00 574                                 | 9 0              | 10                 | 240  | 010    | 410    |       | 7 | E 97   | =        | 227   | 370       | 230      | 270<br>27<br>275<br>260                | 950       | 369   | 102   |    |
| ő              |  | 0.69             | 125                | 240  | 12     | 007    |       | 248                                     | TABLE  | 0        | 2 2 4 4 4 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 342       | 10       | 275<br>285<br>285<br>260               | 510       | 361   | 103   |    |
|                | 22 22                                    | 14               | 225                | 235  | 570    | 385    |       | 4.7                                     |  | 8        | 76<br>28<br>94<br>70                        | 34.2      | 220      | 280<br>280<br>290<br>260               | 502       |       | 103   |    |
| 90             |  | 0.4              | 10                 | 18   | 13     | 365    |       | 22                                      |  | 80       | 74<br>31<br>91                              | 378       | 12       | 275<br>290<br>290<br>262               |           | 328   | 104   |    |
| 20             | 22 | 99               | 7 7 8 0            | 19   | 6 5 5  | 325    |       | 37                                      |  | 07       | 27 7 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9    | 1402      | 235      | 275 290 290 265                        | 470       |       | 24    | +  |
|                |  | ~                | 250 2              | 260 2                                      | - 2    | 270 3  |       | 30                                      |  | 90       | 30 90                                       | 111       | 242 2    | 288 2                                  | 410 4     | 256 2 | 110 1 |    |
| 18             | 68 22 22                                 |                  | 300 2              | 240 2                                      |        | 21 21  |       | E 23                                    | 7.<br>e 8<br>E E   | 90       | 20<br>20<br>34<br>54                        | 2         | 260 2    | 280 2<br>27<br>295 3<br>265 2          |           | 201 2 | 2.8 1 |    |
|                |  |                  | 300 3              | 230 2                                      |        | -      |       | E E 23                                  | 60<br>60<br>60<br>60<br>60<br>60   |          | 57  |           | 285 2    | 265 2<br>275 2<br>260 2                |           | 32    | 2     |    |
| 8              |  |                  | 300                | 26.0                                       |        |        |       | 10<br>24<br>24                          | 4  | 03 0     |   |           | 285 28   | 260 26                                 |           |       |       |    |
| 04 05          | 0 "                                      |                  |                    |  |        |        |       | 20 1<br>24 2                            | GERMANY  | 10       |   |           |          |  |           |       |       |    |
| 03 04 05       |  |                  | 300                | 0.02                                       |        |        |       |   |  |          |   |           | 8 295    | 2 7 2 2 2 2 5 0 0 2 5 0 0 2 5 0 0      |           |       |       | w  |
| 02 03 04 05    | 0.0                                      |                  | 295                | 240  |        |        |       | E 12 4 24                               | FRE I BURG.  | 0        | 70 67<br>31 28<br>76 74<br>62 58            |           | 5 298    | 255 255<br>27 27<br>260 265<br>245 250 |           |       |       |    |
| 01 02 03 04 05 | 72 68<br>23 22                           |                  | 0.0                | 0.0  |        |        |       | 34                                      | a a  | 8        | 2020  |           | 295      | 5000                                   |           |       |       |    |
| 02 03 04 05    | 0 0 0<br>75 72 68<br>22 23 22            | LO LO LO         | NT 12              | NAT 240                                    | 2 F    | N E    | 0 F   |   |  | 0        |   | 8F 33     |          |  | 9 =       | 9 F   | O.F.  | F  |
| 01 02 03 04 05 | 72 68<br>23 22                           | MED<br>CN1<br>UQ | MED 300<br>CNT 122 | (M3000) F2 MED 240<br>CNT 5<br>U0 LQ       | MEO    | MEO    | MED   | MED                                     |  | MOUR     | OF SOL                                      | BF 33     | C CNT C  | (M3000) F2 MED 2<br>CNT 00 2:          | MED       | MED   | MED   |    |

APRIL: 1956

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES.

MAY. 1956

WEEP 1+25 MC TO 20+0 MC IN 10 MINUTES+

| MOH                   | 00                              | ō  | 8  | 03                            | 0.4                           | 90                            | 98                              | 07                               | 80                            | 60                             | 2                                       | =                       | 2                       | 5                                       | 4                       | 5                         | 9                       | -  | 8  | 6                       | 20   | 21                      | 22                       | 23                      |            | HOUR        |                          | 00                            | 5                 | 8   | 03   | ğ                       | 90                      | 8                       | 01                      | 8                                       | 8                       | 2                       | =                       | ~                       | ₽                       | 4                       | 0                     | 9         | 13                      | 9                       | 61                      | 50       | -                                       | S                       | 200                     |
|-----------------------|---------------------------------|--|--|-------------------------------|-------------------------------|-------------------------------|---------------------------------|----------------------------------|-------------------------------|--------------------------------|---|-------------------------|-------------------------|---|-------------------------|---------------------------|-------------------------|--|--|-------------------------|--|-------------------------|--------------------------|-------------------------|------------|-------------|--------------------------|-------------------------------|-------------------|---|--|-------------------------|-------------------------|-------------------------|-------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-----------|-------------------------|-------------------------|-------------------------|----------|---|-------------------------|-------------------------|
|                       | 3                               |  | 1  | l                             |                               |                               |                                 |                                  |                               |                                |   |                         |                         |   |                         |                           |                         |  |  |                         |  |                         |                          |                         |            |             | 1                        |                               |                   |   |  |                         |                         |                         |                         |   |                         |                         |                         |                         |                         |                         |                       | ļ         |                         |                         |                         | L        | •                                       | 3                       | 3                       |
| MED<br>CNT<br>UQ      | 31<br>31<br>58                  | 50 9 9<br>9 9 9 9 9 9                            | 4 5 2 3 2 3                              | 946                           | 4.6<br>3.1<br>3.5<br>3.5      | 33 39                         | 47<br>51<br>51                  | 31 32 32 59                      | 82<br>31<br>92 1              | 90<br>31<br>100<br>84          | 101                                     | 98 29 110 97            | 108<br>31<br>116<br>102 | 106<br>31<br>113<br>96                  | 110<br>31<br>116<br>103 | 9.8<br>3.1<br>10.8<br>9.6 | 104<br>31<br>106<br>96  | 95 30 80 80 80 80 80 80 80 80 80 80 80 80 80 | 4 0 0 0<br>0 0 0<br>0 0 0                        | 31                      | 312  | 311                     | 6.2<br>3.1<br>6.6<br>5.5 | 58<br>31<br>52<br>52    | \$         | F2          | CST                      | 34 2 3 9                      | 320 33            | 2 6 8 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 | 38 2 9 4 6 9 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9 9 | 36 28 32 32             | 33 28 41 28             | 31<br>29<br>38<br>25    | 46<br>28<br>57<br>40    | 0 | 81<br>28<br>75<br>75    | 91<br>29<br>102<br>80   | 93<br>28<br>102<br>86   | 96<br>29<br>102<br>88   | 96<br>28<br>102<br>84   | 94<br>28<br>101<br>82   | 92<br>28<br>102<br>82 | 1000      | 81<br>28<br>94<br>70    | 67<br>82<br>57          | 62<br>28<br>71<br>50    | 29 62 37 | 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | 39                      | 38 28 33                |
| MED<br>CNT<br>UQ      |                                 |  |  |                               |                               |                               |                                 | m                                |                               | 12                             | 16                                      | 255                     | 260                     | 258                                     | 250                     | 258                       | 250                     | 2  |  |                         |  |                         |                          |                         | 72         | F2          | CNT CNT                  |                               |                   |   |  |                         |                         | -                       | 4                       | m                                       | 4                       | 235                     | 240                     | 240                     | 17                      | 240                     | 240                   |           |                         |                         |                         |          |   |                         |                         |
| CNT                   | 312                             | 302  | 31                                       | 31                            | 31                            | 30 275                        | 31 2                            | 30 2                             | 30 2                          | 225 27 27                      | 220                                     | 220                     | 220 23                  | 222                                     | 230                     | 230                       | 30                      | 240  | 30   | 230                     | 235  | 30                      | 30                       | 30                      |            | L           | MED 2<br>CNT<br>UD<br>LO | 285 2                         | 275               | 280   | 280  | 270                     | 260                     | 260                     | 242 26                  | 225                                     | 222                     | 220                     | 220                     | 230                     | 230                     | 230                     | 230                   | 230       | 220                     | 225                     | 228                     | 235      | 258                                     | 288                     | 290<br>28               |
| (M3000) F2 ME0 CNT UD | 255<br>31<br>270<br>234         | 255<br>30<br>264<br>241                          | 262<br>30<br>273<br>242                  | 267                           | 260<br>29<br>281<br>247       | 268 2<br>31 290 3<br>258 2    | 269 3<br>31<br>300 3<br>276 2   | 313 3<br>313 3<br>321 3<br>299 3 | 312 3<br>29<br>329 3<br>301 2 | 306<br>22<br>315<br>288<br>288 | 300                                     | 298<br>18<br>308<br>288 | 296<br>26<br>304<br>292 | 300<br>20<br>310<br>292                 | 296<br>27<br>304<br>288 | 298<br>22<br>304<br>292   | 306<br>21<br>314<br>296 | 304<br>18<br>320<br>298                      | 311<br>25<br>320<br>303                          | 311<br>310<br>289       | 289<br>31<br>299<br>278                    | 276<br>31<br>292<br>269 | 269<br>31<br>280<br>258  | 258<br>30<br>276<br>248 | Ξ.         | (M3000)F2   | MED 2<br>CNT<br>UD 2     | 274 2<br>28<br>282 2<br>268 2 | 278<br>293<br>270 | 279<br>27<br>289<br>267                     | 277<br>28<br>287<br>270                          | 276<br>26<br>291<br>268 | 289<br>27<br>306<br>276 | 294<br>27<br>310<br>276 | 315<br>28<br>322<br>310 | 338<br>28<br>353<br>328                 | 342<br>27<br>360<br>320 | 334<br>25<br>350<br>316 | 330<br>21<br>344<br>316 | 335<br>27<br>348<br>328 | 328<br>22<br>351<br>310 | 327<br>23<br>338<br>318 | 331 24 346 314        | 326       | 327<br>28<br>335<br>316 | 316<br>27<br>326<br>306 | 312<br>28<br>331<br>300 | 303      | 288<br>28<br>294<br>278                 | 274<br>25<br>288<br>284 | 276<br>25<br>287<br>266 |
| MED                   |                                 |  |  |                               |                               |                               | -                               | m                                | w<br>4                        | 410 4                          | 044                                     | 0.0                     | 4<br>0 v                | 110                                     |                         |                           | -                       |  |  |                         |  |                         |                          |                         | fo F       |             | CNT                      |                               |                   |   |  |                         |                         | ~                       | 2                       |   |                         | 004                     | 420                     | т.                      | 420                     | 0                       | -                     |           |                         |                         |                         |          |   |                         |                         |
| MED                   |                                 |  |  |                               |                               |                               | E<br>150 2<br>17                | 211 2 28                         | 271 3                         | 312 3                          | 332 3                                   | 34.9                    | 355                     | 350                                     | 345                     | 327                       | 296                     | 237  | 160<br>11  |                         |  |                         |                          |                         | fo E       |             | MEO                      |                               |                   |   |  |                         |                         |                         | 160<br>28               | 218                                     | 272                     | 308                     | 321                     | 332                     | 328                     | 318                     | 300                   | 255       | 176                     |                         |                         |          |   |                         | -                       |
| MED                   |                                 |  |  |                               |                               |                               |                                 | 100                              | 1111 1                        | 108 1                          | 25                                      | 108                     | 106                     | 104                                     | 107                     | 108                       | 110                     | 116  | 2  |                         |  |                         |                          |                         | - <u>4</u> | ш           | MED                      |                               |                   |   |  |                         |                         |                         | -                       | 122                                     | 113                     | 1111                    | 111 22                  | 111                     | 110                     | 113                     | 112                   | 116       | 121                     |                         |                         |          |   |                         |                         |
| MED                   | 3 IE                            | 3 16   | 31                                       | 31.6                          | 31                            | 33                            | 16<br>31                        | 16<br>31                         | 14                            | 31                             | 30                                      | 31                      | 29                      | 27                                      | 21 31                   | 15                        | 17                      | 19   | 18   | 31                      | 333  | 31                      | 33                       | 3 3 3                   | fo Es      |             | MED                      | 29                            | 29                | E 29  | E 29   | E 29                    | E 28                    | E 29                    | 14                      | 58                                      | 2.8                     | 2.8                     | 2.7                     | 5.6                     | 27                      | 2.8                     | 28                    | 788       | 22                      | 29                      | E 28                    | 29       | E 28                                    | E 29                    | E 28                    |
|                       | FRE18URG.                       |  | GERMANY                                  |                               | (48°1N*                       | 7.8E)                         |                                 |                                  |                               | -                              | TABLE                                   |                         |                         |   |                         |                           |                         |  |  |                         |  | -                       | TIME LI                  | LOCAL                   |            |             | u.                       | FRE JBURG.                    |                   | GERMANY                                     |  | 148 a 1 N s             | , 7.8E)                 | Ē                       |                         |   |                         | TABLE                   | LE 92                   |                         |                         |                         |                       |           |                         |                         |                         |          | -                                       | TIME L                  | LOCAL                   |
| HOUR                  | 00                              | 0  | 05                                       | 03                            | 90                            | 90                            | 90                              | 20                               | 90                            | 8                              | 0                                       | =                       | ~                       | 5                                       | 4                       | 5                         | 9                       | 17   | 9  | - 61                    | 20   | 2                       |                          | 23                      |            | HOUR        |                          | 00                            |                   | 05  |  | 0.4                     |                         | 90                      | 07                      | 88                                      | 60                      | 2                       | =                       | 12                      | E.                      | 4                       | 5                     | 9         | -                       | 8                       | 6                       | 02       | 12                                      | 22                      | 23                      |
| CNE                   | -                               | 32 32 32 32                                      | 30 30 30 30 30 30 30 30 30 30 30 30 30 3 | -                             |                               |                               |                                 |                                  |                               | 78<br>30<br>70                 | 4000<br>4000                            | 980 586                 | 4000                    | 9 6 6 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 4600<br>000             | 76<br>30<br>81<br>73      | 9 2 3 2 9               | 97780  | 29 2 2 2 3 3 4 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 29 29 30                | 37 5 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 33                      | 30                       | 34 29 36 30             | 9          | to F2       | ME0<br>CNT<br>UO         | 33                            | 34                | 3.6   | 35   | 3.2                     | 32                      | 30                      | 33                      | 5.9                                     | 748                     | 58                      | 500                     | 27                      | 272                     | 28                      | 2.9                   | 29        | 29                      | 700                     | 297                     | 32 28    | 29                                      | 31 28                   | 33                      |
| CNT                   |                                 |  |  |                               |                               |                               |                                 |                                  |                               | 4                              | 12 2                                    | 230                     | 230                     | 122                                     | 245                     | 4                         | ~                       |  |  |                         |  |                         |                          |                         | h, F2      |             | MED<br>CNT<br>UQ         |                               |                   |   |  |                         |                         | -                       |                         |   |                         | 4                       | 540                     | 235                     | 228                     | ~                       | 2                     |           |                         | ~                       |                         | -        |   |                         |                         |
| CNT                   | 295                             | 285  | 290                                      | 30 2                          | 285 2                         | 270 2                         | 270 27                          | 260 2                            | 31 .                          | 220 2                          | 230 2                                   | 225                     | 220 2                   | 230                                     | 230                     | 225                       | 300                     | 220  | 225  | 23.5                    | 265  | 280                     | 300                      | 300                     |            | L           | CNT CO                   | 300                           | 295               | 280   | 280  | 255                     | 250                     | 235                     | 240                     | 225                                     | 220                     | 225                     | 230                     | 225                     | 225                     | 230                     | 228                   | 220       | 215                     | 225                     | 240                     | 24.5     | 22                                      | 23                      | 305                     |
| F2 MED CNT UD UD      | 274 2<br>28 2<br>288 2<br>266 2 | 272<br>27<br>27<br>281<br>281<br>266<br>266<br>2 | 273<br>29<br>279<br>279                  | 271 2<br>27<br>282 2<br>267 2 | 280 2<br>26<br>288 2<br>267 2 | 277 2<br>29<br>288 3<br>270 2 | 285 2<br>26 3<br>306 3<br>278 2 | 290 3-<br>28 308 3-<br>274 3.    | 340<br>29<br>352<br>325<br>3  | 346 3<br>28<br>353 3           | 338 3<br>350 3<br>332 3                 | 338 338 3333 333 333    | 337                     | 330 342 318                             | 333<br>29<br>348<br>325 | 338<br>29<br>348<br>342   | 337<br>30<br>346<br>324 | 330<br>27<br>341<br>313                      | 324<br>28<br>336<br>317                          | 311<br>29<br>328<br>287 | 282<br>28<br>298<br>273                    | 274<br>26<br>284<br>268 | 271<br>29<br>281<br>261  | 269<br>29<br>278<br>259 | Σ          | (M 3000) F2 | MED                      | 273                           | 273               | 279   | 283  | 291                     | 300                     | 306                     | 286                     | 334                                     | 338                     | 335                     | 343                     | 336                     | 336                     | 333                     | 341                   | 339       | 332                     | 320                     | 318                     | 306      | 278                                     | 272                     | 270                     |
| MED                   |                                 |  |  |                               |                               |                               |                                 |                                  |                               |                                | 30                                      | 390                     | -7                      | ~                                       | -                       |                           |                         |  |  |                         |  |                         |                          |                         | fo F       |             | CNT                      |                               |                   |   |  |                         |                         | -                       |                         |   |                         |                         | 2                       | m                       | -                       |                         |                       |           |                         | -                       |                         |          |   |                         |                         |
| MEO                   |                                 |  |  |                               |                               |                               |                                 |                                  | 21 21                         | 224 2                          | 260 2                                   | 279 2                   | 289 2                   | 290 2                                   | 271 21                  | 212                       | 184                     |  |  |                         |  |                         |                          |                         | 10 E       |             | MED                      |                               |                   |   |  |                         |                         |                         |                         | 155                                     | 223                     | 3 255                   | 276                     | 282                     | 279                     | 261                     | 225                   | 160<br>14 |                         |                         |                         |          |   |                         |                         |
| MED                   |                                 |  |  |                               |                               |                               |                                 |                                  | 2                             | 7 07                           | 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 119 1                   | 121 1                   | 121 1                                   | 121                     | 122                       |                         |  |  |                         |  |                         |                          |                         | -e         | ш           | MEO                      |                               |                   |   |  |                         |                         |                         |                         | ð                                       | 121                     | 116                     | 116                     | 1117                    | 118                     | 119                     | 123                   | -         |                         |                         |                         |          |   |                         |                         |
| MED                   | 30 6                            | 30 6   | 30                                       | 30 8                          | 30 E                          | 9 0                           | 0.00                            |                                  | 31                            | 20                             | 2.2                                     | 22                      | 20                      | 40                                      | 50                      | 19                        | 18                      | m e  | . E  | E 20                    | 9 0  | E C                     | E S                      |                         | fo Ea      |             | MEO<br>CNT               | E 80                          | E 20              | E C   | , E  | m c                     | , E                     | E                       | E 26                    | E 26                                    | 20                      | 0 18                    | 26                      | 26 27                   | 28                      | 22                      | 18                    | 118       | E 29                    | E 29                    | E 29                    | E 29     | E 29                                    | E 28                    | E 29                    |

TABLE 90

TABLE 89

TABLE 94

TABLE 93

| 1                               |  |  |   | 0.0  |   |                                       |  |  |   | 5.2                                     |
|---------------------------------|--|--|---|--|---|---------------------------------------|--|--|---|---|
| LOCAL                           | 23   | 3.0  |   | 280  | 30  |                                       |  |  | 31  | OCTOBER: 1955                           |
| TIME LOCAL                      | 22   | 3 14   |   | 275  | 31  |                                       |  |  | 31  | TOBER                                   |
|                                 | 2  | £ 4  |   | 250  | 294   |                                       |  |  | 14  | 00                                      |
|                                 | 20   | 31   |   | 30   | 315   |                                       |  |  | 31  |   |
|                                 | 6  | 31   |   | 230  | 322   |                                       |  |  | 31  |   |
|                                 | 8  | 31   |   | 230  | 322   |                                       |  |  | 31  |   |
|                                 | -1   | 78   | ~   | 235  | 333   |                                       | 170  | 151  | 31  |   |
|                                 | 91   | 31   | 255   | 240  | 329   | ~                                     | 220  | 121  | 24  |   |
|                                 | 6  | 31   | 250   | 240  | 328   | -                                     | 260  | 11.2   | 32  |   |
|                                 | 14   | 31   | 255   | 230  | 318   | 6                                     | 288  | 112  | 31  |   |
|                                 | 60   | 31   | 260   | 220  | 326   | 007                                   | 310  | 111  | 3.1   |   |
|                                 | 12   | 31   | 250   | 17   | 327   | 425                                   | 312  | 111  | 31  |   |
|                                 | -  | 30   | 255   | 220  | 32.9  | 41.5                                  | 309  | 1111   | 32  |   |
|                                 | 0  | 312  | 250 22  | 20 20  | 331   | 415                                   | 298  | 11.2   | 31  |   |
|                                 | 60   | 31   | 245 2   | 228  | 338   | 007                                   | 278  | 27   | 29  |   |
|                                 | 90   | 31   | 245 2   | 225 2  | 341 3   | 350 4                                 | 240 2  | 21 120   | 21  |   |
|                                 | 07 0   | 3.1.   | 2 2   | 230 2  | 343   | 2 3                                   | 175 2  | 133 1  | 31.8  | ο<br>0                                  |
|                                 | 90   | 9 119  |   | 30 2   | 308   |                                       | -  | ~  | -   | MINUT                                   |
| . 9E)                           | П  | 31 3   |   |  | 309 30  |                                       |  |  | 31 E  | 10                                      |
| 14. 7                           | 1 05   | 31 3   |   | 9 33   |   |                                       |  |  | 3.1 3   | MC IN                                   |
| FREIBURG. GERMANY (48.1N. 7.8E) | 8  |  |   | 270  | 291   |                                       |  |  | 31 3  | SWEEP 1,25 MC TO 20,0 MC IN 10 MINUTES. |
| MANY                            | 03   | 318  |   | 30 30  | 30 30   |                                       |  |  | w   | 0 10                                    |
| . GEF                           | 8  | 33   |   | 31 31  | 30 30   |                                       |  |  | E 31  | 25 H                                    |
| 18URG                           | ō  | 38   |   | 31   | 30  |                                       |  |  | . 31  | EP 1                                    |
| FRE                             | 8  | 37   |   | 280  | 31  |                                       |  |  | 31  | SWS                                     |
|                                 |  | MED<br>CNT<br>LO   | CNT   | MEO<br>CNT<br>LO   | CNT   | MED                                   | MED  | MEQ  | MEG   |   |
|                                 | HOUR   | 0.1  |   |  | (M 3000)F2  |                                       |  |  |   |   |
|                                 |  | fo F2  | h. F2   | ï.c  | W 3C  | 10 F I                                | †o E   | ÷<br>Ш   | fo Es   |   |
|                                 |  |  |   |  |   |                                       |  |  |   |   |
| LOCAL                           | 23   | 30   |   | 30   | 273   |                                       |  |  | 30  | 1955                                    |
| IME LO                          | 22   | 33   |   | 292  | 30  |                                       |  |  | 30  | E.B.                                    |
|                                 |  |  |   |  |   |                                       |  |  | al I  | 00                                      |
| -                               | -7   | 33   |   | 260  | 30  |                                       |  |  | 30 E  | NOVEMBER, 1955                          |
| -                               | 20 21  | 37 33 29 30  |   | 245 260  | 29 30   |                                       |  |  | ۵ ا   | NOVEMB                                  |
| -                               | Н  |  |   | 245  | 308   |                                       |  |  | 30  | NOVEMB                                  |
| -                               | 20   | 37   |   | 235 245 27   | 316 308<br>30 29  |                                       |  |  | 30 30   | NOVEMB                                  |
| -                               | 18 19 20   | 42 37 39   |   | 220 235 245 27   | 318 316 308<br>30 30 29   |                                       |  |  | 30 30 30  | NOVEMB                                  |
| -                               | 17 18 19 20  | 50 42 37   |   | 220 220 235 245<br>29 29 28 27   | 328 318 316 308<br>30 30 30 29  |                                       | 6-2<br>14  | 1  | 36 36 30 30 30  | NOVEMB                                  |
| -                               | 02 61 81 20  | 78 64 50 42 37<br>30 30 30 29  |   | 220 220 235 245<br>29 29 29 28 27  | 341 328 318 316 308<br>30 30 30 30 29   |                                       | 29 162<br>26 14  |  | 20 16 15 E E E E E E E E E E E E E E E E E E  | NOVEMB                                  |
| -                               | 15 16 17 18 19 20  | 90 78 64 50 42 37<br>30 30 30 30 30 29   | 00  | 235 220 220 220 235 245<br>29 29 29 29 28 27   | 333 341 328 318 316 308<br>29 30 30 30 30 29  |                                       | 229  | 121  | 20 20 16 15 E E E E E E E E E E E E E E E E E E   | NOV EMB                                 |
| -                               | 14 15 16 17 18 19 20   | 88 90 78 64 50 42 37<br>30 30 30 30 30 30 29   | 35 245<br>17 10   | 235 256 220 220 235 245<br>29 29 29 29 29 28 27  | 328 333 341 328 318 316 308<br>29 29 30 30 30 30 29   | 2                                     | 270 229<br>25 26   | 121 121  | 23 20 20 16 15 E E E E E E E E E E E E E E E E E E  | NOVEMB                                  |
| per                             | 13 14 15 16 17 18 19 20  | 86 88 90 178 64 50 42 37 30 30 30 30 29  | 235   | 230 235 235 220 220 220 235 245<br>25 29 29 29 29 28 24  | 230 328 333 341 328 318 310 300 20 28 29 29 310 310 300 20 20 20 20 20 20 20 20 20 20 20 20 2   |                                       | 288 270 229<br>28 25 26  | 115 121 121  | 26 23 20 20 16 15 E E E E E E E E E E E E E E E E E E   | NOVEMB                                  |
| per                             | 12 13 14 15 16 17 18 19 20                                     | 90 86 88 90 78 64 50 42 37 30 30 30 30 29  | 230 235 235 23  | 220 230 239 235 220 220 230 235 245 25 29 29 29 29 29 29 29 29 29 29 29 29 29  | 26 28 29 29 341 328 318 316 306<br>26 28 29 29 30 30 30 30 29   | 360                                   | 293 288 270 229<br>21 28 25 26                                   | 116 115 121 121<br>16 7 9 7                                | 26 26 23 20 20 16 15 E E E E E E E E E E E E E E E E E E                                      | NOVEHB                                  |
| per                             | 11 12 13 14 15 16 17 18 19 20                                  | 29 30 30 30 30 30 30 30 30 30 29 42 37   | 235 230 235<br>23 23 17   | 222 220 230 235 235 220 220 220 235 245 245 245 245 245 245 245 245 245 24   | 27 26 28 29 29 34 328 318 318 316 306<br>27 26 28 29 29 30 30 30 30 29  | 360 360                               | 290 293 288 270 229<br>22 21 28 25 26                            | 114 116 115 121 121 121 16 1 7 9 17                        | 30 26 26 23 20 20 16 15 E E E E E E E E E E E E E E E E E E                                   | NOV EMB                                 |
| per                             | 10 11 12 13 14 15 16 17 18 19 20                               | 88 91 90 86 88 90 178 64 50 42 37 30 29 50 50 50 50 50 50 50 50 50 50 50 50 50   | 235 235 230 235<br>17 23 23 17  | 225 222 220 230 239 239 220 220 220 233 245 24 24 26 25 25 29 29 29 29 29 29 29 29 29 29 29 29 29  | 333 337 339 330 328 333 341 328 318 316 308 29 29 29 29 30 30 30 30 29  | 360                                   | 271 290 293 288 270 229<br>16 22 21 28 25 26                     | 117 114 116 115 121 121 121 16 17 9 17                     | 27 30 26 28 23 20 20 10 15 E E E E E  | NOV EMB                                 |
| per                             | 09 10 11 12 13 14 15 16 17 18 19 20                            | 28 30 29 30 30 30 30 30 30 30 30 29 29   | 235 230 235<br>23 23 17   | 225 225 222 220 230 235 225 220 220 220 235 245 245 27 24 24 24 24 25 25 25 29 29 29 29 29 24 24 21  | 346 333 337 333 330 328 333 341 328 318 316 308 28 29 29 30 30 30 30 29   | 360 360                               | 244 271 290 293 288 270 229<br>17 16 22 21 28 25 26              | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 24 27 30 26 28 23 20 20 16 15 E E E E E E E E E E E E E E E E E E                             | NOVEMB                                  |
| <b>→</b>                        | 08 09 10 11 12 13 14 15 16 17 18 19 20                         | 69 80 88 91 90 86 88 90 78 64 50 42 37 30 20 29 30 20 30 30 30 30 20 29  | 235 235 230 235<br>17 23 23 17  | 225 225 225 220 230 230 235 225 220 220 230 235 245 245 25 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25  | 34 346 313 313 313 310 328 333 341 328 318 316 306 30 30 30 30 20 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30   | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 117 114 116 115 121 121 121 16 17 9 17                     | 30 24 27 30 26 28 23 20 20 16 15 E E E  |   |
| -                               | 09 10 11 12 13 14 15 16 17 18 19 20                            | 4.0 6.9 80 88 91 90 86 88 90 778 64 50 42 37 29 30 20 29 30 30 30 30 30 30 29  | 235 235 230 235<br>17 23 23 17  | 230 225 225 225 227 220 230 235 235 220 220 220 235 245 25 25 25 25 25 25 25 25 25 25 25 25 25   | 225 344 346 333 337 326 328 333 341 328 318 316 306 20 2 2 3 3 3 3 3 3 3 3 2 2 2 2 3 3 3 3  | 360 360                               | 244 271 290 293 288 270 229<br>17 16 22 21 28 25 26              | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 29 30 24 27 30 26 28 23 20 20 16 15 E E E E E   |   |
|                                 | 08 09 10 11 12 13 14 15 16 17 18 19 20                         | 28 +8 6 69 80 88 91 90 86 88 90 78 64 50 42 37 50 29 30 20 30 30 30 30 30 29 29  | 235 235 230 235<br>17 23 23 17  | 245 230 225 225 225 220 230 235 235 229 29 29 29 29 29 24 245 21 21 21 21 21 21 21 21 21 21 21 21 21   | 300 325 344 346 333 337 336 328 329 341 328 318 316 305 30 30 30 30 30 30 30 30 30 30 30 30 30  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 30 29 30 28 30 28 30 30 30 30 30 30 30 30 30  |   |
|                                 | 07 08 09 10 11 12 13 14 15 16 17 18 19 20                      | 30 28 48 69 90 88 91 90 86 88 90 178 64 50 42 37 30 30 30 29 30 30 30 30 29 29   | 235 235 230 235<br>17 23 23 17  | 256 245 230 225 225 225 220 230 235 225 220 230 235 226 245 245 245 245 245 245 245 245 245 245  | 296 300 325 344 346 333 337 333 330 328 333 341 328 318 316 305 30 30 30 30 30 30 30 30 30 30 30 30 30  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 30 30 29 30 28 30 27 30 30 30 30 30 30 30 30 30 30  |   |
|                                 | 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20                   | 32 30 28 48 69 60 68 91 90 86 88 90 78 64 50 42 37 29 30 30 20 28 30 28 30 30 30 30 30 30 29 29  | 235 235 230 235<br>17 23 23 17  | 265 258 245 230 225 225 222 220 230 235 235 220 230 235 245 245 245 245 245 245 245 245 245 24   | 290 296 300 125 344 346 333 337 333 330 128 334 341 318 318 316 305 29 30 30 30 30 30 20 29 30 30 30 30 30 30 30 30 30 30 30 30 30  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 30 30 30 29 30 28 30 29 30 30 30 30 30 30 30 30 30 30   |   |
|                                 | 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20                | 34 32 30 28 48 69 80 88 91 90 86 88 90 78 64 50 42 37 30 29 30 30 30 30 30 29 29   | 235 235 230 235<br>17 23 23 17  | 282 265 256 245 230 225 225 225 220 230 235 225 220 230 235 220 230 235 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25   | 280 290 296 300 325 344 346 333 337 338 330 328 333 341 328 318 316 305 30 20 20 20 30 30 20 20 20 30 30 30 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30                                       | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 30 30 30 30 59 30 54 27 30 56 28 23 20 20 10 15 6 6 6 7 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | TO 20.0 MC IN 10 MINUTES.               |
|                                 | 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20             | 35 34 32 30 28 48 69 80 68 91 90 66 88 90 78 64 50 42 37 30 30 20 29 30 29 30 30 30 30 30 30 20 29   | 235 235 230 235<br>17 23 23 17  | 282 282 285 285 245 210 225 225 225 220 230 230 235 220 230 235 220 230 235 245 245 25 250 235 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25                      | 274 280 290 296 300 325 344 346 333 337 28 29 28 38 333 341 326 318 316 306 30 30 30 30 20 20 30 30 30 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30   | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 30 30 30 30 29 30 28 27 30 26 28 23 20 20 30 30 30 30 30 30 30 30                             | TO 20.0 MC IN 10 MINUTES.               |
|                                 | 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20          | 34 32 30 28 48 69 80 88 91 90 86 88 90 78 64 50 42 37 30 29 30 30 30 30 30 29 29   | 235 235 230 235<br>17 23 23 17  | 290 282 283 255 256 245 230 225 225 225 220 230 235 235 220 230 235 245 245 245 245 245 245 245 245 245 24   | 279 274 280 290 299 300 325 344 346 333 337 338 330 328 333 341 328 318 316 305 30 30 30 30 30 30 30 30 30 30 30 30 30  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 10 30 30 30 30 30 29 30 29 30 29 30 30 30 30 30 30 30 30 30 30 30                             | TO 20.0 MC IN 10 MINUTES.               |
|                                 | 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20       | 34 35 34 32 30 28 48 69 80 88 91 90 86 88 90 778 64 50 42 37 30 30 30 30 30 30 30 29   | 230 235 230 230 235 230 230 230 230 230 230 230 230 230 230 | 240 280 282 282 285 286 245 230 225 225 222 220 230 235 225 220 230 235 235 220 230 235 245 245 245 250 230 235 245 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25 | 276 279 274 280 290 298 300 325 344 346 333 337 333 330 328 339 341 328 318 316 305 29 29 30 30 30 30 29 30 30 30 29  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 1 15 19 17 114 116 115 121 121 121 121 121 121 121 121 121 | 10 30 30 30 30 30 58 30 58 30 50 30 30 30 30 30 30 30 30 30                                   |   |
| FREIBURG, GEMMANY (48.1N. 7.8E) | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20    | 35 35 34 32 30 28 48 69 60 68 91 90 66 68 90 778 64 50 42 37 30 30 30 30 29 30 29 30 29 30 30 30 30 30 30 29   | 235 235 230 235<br>17 23 23 17  | 290 282 283 255 256 245 230 225 225 225 220 230 235 235 220 230 235 245 245 245 245 245 245 245 245 245 24   | 279 274 280 290 298 300 325 344 346 333 337 338 330 328 333 341 328 318 316 305 30 30 30 30 30 30 30 30 30 30 30 30 30  | 360 360                               | 198 244 271 290 293 288 270 229<br>27 17 16 22 21 20 25 26       | 119 117 114 116 115 121 121 121 19 19 17 19 17             | 10 30 30 30 30 30 29 30 29 30 29 30 30 30 30 30 30 30 30 30 30 30                             | TO 20.0 MC IN 10 MINUTES.               |
|                                 | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20    | WED 34 35 34 32 30 28 48 69 80 69 91 90 66 88 90 778 64 50 42 37 07 30 30 30 30 30 30 30 29 29 29 20 28 30 28 30 28 30 28 30 30 30 30 30 30 30 30 30 30 30 30 30 | WED 235 235 235 235 236 235 000 000 000 000 000 000 000 000 000 0   | 240 280 282 282 285 286 245 230 225 225 222 220 230 235 225 220 230 235 235 220 230 235 245 245 245 250 230 235 245 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25 | MEG 276 279 274 280 296 300 325 344 346 333 331 333 330 328 339 341 348 318 318 316 305 CMT 29 30 30 30 29 29 30 30 28 29 21 26 28 29 29 30 30 30 30 29 29 00 00 00 00 00 00 00 00 00 00 00 00 00 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 150 159 244 271 250 253 288 270 229<br>1 27 17 16 22 21 29 25 25 | 1 15 19 17 114 116 115 121 121 121 121 121 121 121 121 121 | 10 30 30 30 30 30 58 30 58 30 50 30 30 30 30 30 30 30 30 30                                   | TO 20.0 MC IN 10 MINUTES.               |
|                                 | 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 | 34 35 34 32 30 28 48 69 80 88 91 90 86 88 90 778 64 50 42 37 30 30 30 30 30 30 30 29   | 230 235 230 230 235 230 230 230 230 230 230 230 230 230 230 | 240 280 282 282 285 286 245 230 225 225 222 220 230 235 225 220 230 235 235 220 230 235 245 245 245 250 230 235 245 245 245 25 25 25 25 25 25 25 25 25 25 25 25 25 | 276 279 274 280 290 298 300 325 344 346 333 337 333 330 328 339 341 328 318 316 305 29 29 30 30 30 30 29 30 30 30 29  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 150 159 244 271 250 253 288 270 229<br>1 27 17 16 22 21 29 25 25 | 1 15 19 17 114 116 115 121 121 121 121 121 121 121 121 121 | 10 30 30 30 30 30 58 30 58 30 50 30 30 30 30 30 30 30 30 30                                   | TO 20.0 MC IN 10 MINUTES.               |

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| FREIBL                      | 00   | 0.6              |                  | 285               | 280                    |        |      |                | 13    |
|-----------------------------|------|------------------|------------------|-------------------|------------------------|--------|------|----------------|-------|
|                             |      | MEO<br>CNT<br>UQ | MEO<br>CNT<br>UQ | MEO<br>CNT<br>COT | CNT                    | MEQ    | MEO  | MEO            | MED   |
|                             | HOUR | to F2            | h'F2             | E.                | (M3000)F2              | fo Fi  | to E | _ <del>_</del> | fo Es |
|                             |      |                  |                  |                   |                        |        |      |                |       |
| 5 , 0 E                     | 53   | 27               | 300              |                   | 280                    |        |      |                | 8.0   |
| IME 165.0E                  | 22   | 27               | 280              |                   | 290                    |        |      |                | 39    |
| F                           | 12   | 52               | 270              |                   | 290                    |        |      |                |       |
|                             | 50   | 5 6 7            | 270              |                   | 290                    |        |      |                |       |
|                             | 6    | 30               | 30               |                   | 300                    |        |      |                |       |
|                             | 8    | 30               | 30               |                   | 300                    |        |      |                |       |
|                             | -1   | 30               | 290              |                   | 300                    | 340    | 240  | 130            | 0.50  |
|                             | 91   | 29 6             | 300              |                   | 300                    | 400    | 270  | 130            | 28    |
|                             | 15   | 29               | 320              |                   | 290                    | 420    | 300  | 125            | 29    |
|                             | 4    | 2.9              | 330              |                   | 290                    | 450    | 310  | 125            | 29    |
|                             | 2    | 30               | 330              |                   | 300                    | 460    | 320  | 120            | 28    |
|                             | 12   | 27               | 340              |                   | 300                    | 470    | 330  | 120            | 2.9   |
|                             | =    | 2.5              | 330              |                   | 300                    | 460    | 320  | 120            | 29    |
|                             | 0    | 263              | 340              |                   | 290                    | 460    | 320  | 120            | 28    |
|                             | 60   | 28               | 340              |                   | 300                    | 440    | 310  | 120            | 28    |
|                             | 90   | 56               | 330              |                   | 300                    | 430    | 300  | 120            |       |
|                             | 07   | 5.3              | 320              |                   | 310                    | 400    | 260  | 23             |       |
|                             | 90   | 5 6 6            | 260              |                   | 310                    |        | 240  | 130            |       |
| 2E1                         | 0.55 | 3.8              | 270              |                   | 310                    |        |      |                |       |
| CAMPBELL I. 152.55. 169.2E) | 04   |                  |                  |                   |                        |        |      |                |       |
| 2.55                        | 0.3  |                  |                  |                   |                        |        |      |                |       |
| *                           | 0.5  |                  |                  |                   |                        |        |      |                |       |
| BELL                        | ō    |                  |                  |                   |                        |        |      |                |       |
| CAM                         | 8    |                  |                  |                   |                        |        |      |                |       |
|                             |      | MED<br>CNT<br>UQ | CNT              | MEO<br>CNT<br>UO  | MEO<br>CNT<br>UQ<br>LQ | MEO    | MED  | MEQ<br>CNT     | CNT   |
|                             | HOUR | fo F2            | n'F2             | <u>и</u><br>-e    | (M \$000) F2           | fo F I | fo E | ,4<br>E        | fo Es |
|                             | Ш    | \$               | -E               | - <u>-</u> -      | Σ                      | ę      | ٥    | °£             | -     |

30.9

BURG. GERMANY 148.1N. 7.8E!

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TABLE 96

TIME LOCA

SWEEP 1,25 MC TO 20,0 MC IN 10 MINUTES.

OCTOBER, 1955

SWEEP 1.0 MC TO 13.0 MC IN 2 MINUTES.

SEPTEMBER. 1955

4 22

10 23 29

16 23 30

15 24 30 20 28 30

20 31 30

17 33 29

25 34 28

27 32 30

25 25 31 28

22 22 26 28

23 21 21 28

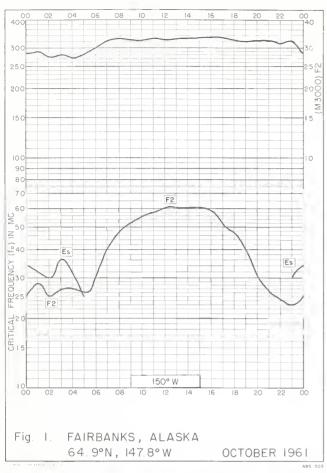
12 17 17 29

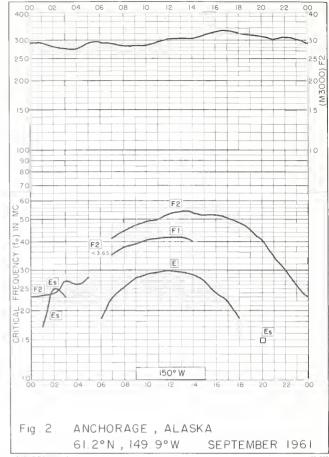
5.6

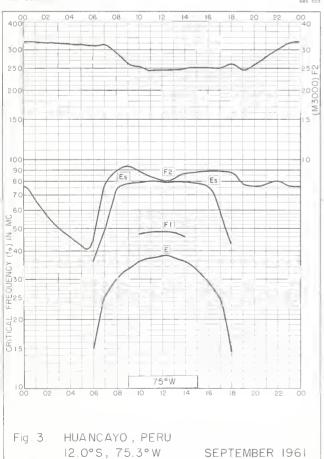
29 29 29

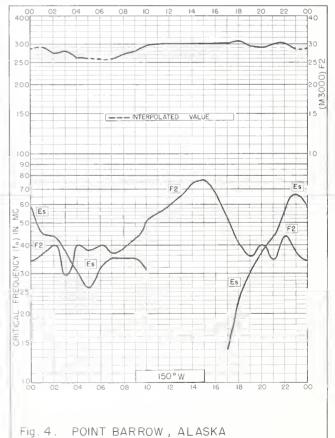
E 160

|            |           |       |                            |       |       |              |       |         |        |        |                |                |          |        |       |           |     |     |        |     |           |       |            |       |               |            | U                      | Chirchest 18 1028000 toyour |                |        |      |       |     |     |     |            |      |       |     |       |     |      |      |           |                 |       |                  |   |       |      |            |
|------------|-----------|-------|----------------------------|-------|-------|--------------|-------|---------|--------|--------|----------------|----------------|----------|--------|-------|-----------|-----|-----|--------|-----|-----------|-------|------------|-------|---------------|------------|------------------------|-----------------------------|----------------|--------|------|-------|-----|-----|-----|------------|------|-------|-----|-------|-----|------|------|-----------|-----------------|-------|------------------|---|-------|------|------------|
|            | 8         | ō     | 8                          | 03    | 0.4   | 8            | 98    | 07 0    | 08 0   | 60     | 0              | =              | 15       | 5      | 4     | 5         | 91  | -   | 91     | 6   | 50        | 12    | 22         | 23    | Ц             | HOUR       | H                      | 00                          | 5              | 8      | 0.3  | 8     | 90  | 8   | 07  | 90         | 60   | 01    | =   | 2     | 2   | 14   | 5    | 9         | 21 9            | 81 2  | 61               | 20                                      | 21    | 22   | 53         |
| CNI        | 16        | 9 - 7 | 13                         | 15    | 1 3   | 0 8 7        | 54    | 188     | 19 10  | 100 1  | 102 1          | 104            | 108 1    | 103    | 100   | 105       | 106 | 108 | 104    | 122 | 128       | 132   | 118        | 13 65 | to F2         |            | CNT                    |                             |                |        |      |       | 21  | 29  | 29  | 5 8 7 8    | 53   | 55    | 52  | 30    | 90  | 30   | 30   | 30        | 2 2 9           | 9 27  | 3 48             | 7 7 7 8 9 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 24 27 | 23   | 27         |
| CNT        |           |       |                            |       |       |              | 2     | 252 2   | 275 28 | 17 285 | 290 3          | 305 3          | 300 3    | 315    | 350   | 35.2      | 332 | 335 |        |     |           |       |            |       | h' F2         |            | MED<br>CNT<br>UD<br>LQ |                             |                |        |      |       | 590 | 260 | 260 | 290        | 300  | 320   | 320 | 320   | 320 | 310  | 30   | 270       | 270             | 9 250 | 0 260            | 270                                     | 270   |      |            |
| CNT        | 195       | 212   | 238                        | 18 2  | 270   | 18 2         | 245 2 | 235 2   | 16 21  | 215 2  | 208 2          | 200 1          | 195 1    | 195    | 195   | 195       | 220 | 245 | 270    | 285 | 18        | 225   | 205        | 195   | 'E            | L.         | CNT                    |                             |                |        |      |       |     |     |     |            |      |       |     |       |     |      |      |           |                 |       |                  |   |       |      |            |
| CNT        | 325<br>15 | 298   | 287                        | 282 2 | 286   | 15 309 3     | 333 3 | 356 3.  | 324 3  | 321 3  | 318 2          | 294 2          | 298 2    | 280    | 13    | 18        | 268 | 273 | 284    | 288 | 296       | 336   | 355        | 344   | Σ             | (M 3000)F2 | MED<br>CNT<br>UG       |                             |                |        |      |       | 310 | 320 | 320 | 320        | 310  | 310   | 310 | 310   | 300 | 310  | 310  | 310       | 300             | 9 27  | 7 28             | 290                                     | 290   | 280  | 260        |
| CNT        |           |       |                            |       |       |              |       | -       | 4      | 485    | 13 4           | 13             | 495      | 13     | 000   | 0 9 9     |     |     |        |     |           |       |            |       | fo F.         |            | MED                    |                             |                |        |      |       |     |     | 290 | 370        | 410  | 420   | 30  | 430   | 30  | 410  | 390  | 350       | 0 €             |       |                  |   |       |      |            |
| MED        |           |       |                            |       |       | w            |       | 229 2   | 289 3  | 327 3  | 349 3          | 358 3          | 360      | 360    | 348   | 333       | 295 | 240 | -      |     |           |       |            |       | ę.            | ш          | MED                    |                             |                |        |      |       |     |     | 220 | 250        | 280  | 300   | 300 | 310   | 290 | 280  | 260  | 240       | 0 210           | 0.5   |                  |   |       |      |            |
| MED        |           |       |                            |       |       | ш            |       | 115     | 109 10 | 107 1  | 105 1          | 107            | 109      | 109    | 111   | 110       | 101 | 113 | ~      |     |           |       |            |       | ш<br>"£       |            | CNT                    |                             |                |        |      |       |     |     | 130 | 130        | 125  | 125   | 125 | 120   | 125 | 130  | 130  | 130       | 0 140           | 0.6   |                  |   |       |      |            |
| MED        | E         | 18    | 13                         | 15    | 13    | <i>7</i> 8 1 | 18    | 17      | 700    | 19     | 21<br>21<br>19 | 21<br>21<br>15 | 23<br>18 | 25     | E 26  | 2 1 2 1 9 | 20  | 28  | 24     | 20  | 15<br>19  | 17 E  | 3 91       | 10 E  | fo Es         |            | MED                    |                             |                |        |      |       |     | 18  | 22  |            | 29   | 5 0 1 | 29  | 28    | 28  | 29   | 29   | 07 04     | 0.5             |       |                  |   |       | 39   | 28         |
|            | LW TRO    | 0 CON | LWIRO. CONGO 12,35. 28,8E) | .35.  | 28.86 | 2            | 0 90  | 07      | 08     | 68     | 0              | -              | 2        | 2      | 4     | 5         | 9   | -   | 92     | 6   | 02        | 5     | TIME 30.00 | 30.0E | L             | HOUR       |                        | -W180*                      | DO 01 02 03 04 | 50 12, | .35. | 28.85 | E)  | 90  | 40  | 8          | 60   | 0     | =   | ~     | 5   | 4    | 2    | 9         | - 12            | 7 18  | 6) 8             | 202                                     | 12    | T1ME | 71ME 30.0E |
| CNT        |           | 24    | 24                         |       |       | F- 00        |       |         |        | 0 =    |                |                | 0 -      | 101 29 | 30    | 500       | 30  | 93  | 30     | 30  | 8 2 7 2 7 | 2 9 9 | 28         | 29    | - to          | to F.2     | CNT                    | 22 2                        | 53             | 15     | 900  | 22.5  | 22  | 500 | 28  | 28         | 30   | 3.0   | 300 | 333   | 29  | 26 5 | 27   | 300       | 1               | 31 29 | 29 30            | 062                                     | 30    | 28   | 200        |
| CNT        |           |       |                            |       |       |              |       | 30 2    | 31 2   | 30 230 | 30 2           | 311            | 30 30    | 30     | 320   | 310       | 302 | 240 |        |     |           |       |            |       | h, F2         |            | MED<br>CNT<br>CNT      |                             |                |        |      |       |     |     | 255 | 260        | 272  | 280   | 280 | 300   | 295 | 310  | 305  | 2 88 2 88 | 18 290          | 0.0   |                  |   |       |      |            |
| CNT        | 31        | 30    | 225                        | 245   | 255   | 255 2        | 30 2  | 235 2   | 225 2  | 220 2  | 210 2          | 205 2          | 200      | 26 2 5 | 21 21 | 190       | 210 | 242 | 250    | 250 | 225       | 30    | 305        | 30    | ic .          | le.        | MEO 2                  | 250 2                       | 228 2          | 22.0   | 230  | 240   | 240 | 255 | 240 | 225        | 215  | 13    | 200 | 20    | 195 | 195  | 202  | 2 2 2 2 9 | 9 13            | 13 20 | 230              | 2 2 2 2 9                               | 305   | 208  | 230        |
| CNT        | 317       | 332   | 312                        | 308   | 304   | 326 3        | 324 3 | 348     | 337 3  | 342 3  | 325 3          | 320            | 314      | 307    | 30    | 282       | 286 | 295 | 303    | 314 | 333       | 351   | 344        | 336   | 2)            | (M3000) F2 | MED CONT               | 334                         | 338            | 329    | 316  | 324   | 322 | 334 | 358 | 358        | 3.68 | 345   | 333 | 326   | 306 | 295  | 300  | 295       | 305             | 29 28 | 28 29            | 3 357                                   | 7 29  | 334  | 315        |
| CNT        |           |       |                            |       |       |              |       | 2       | 420 4  | 18     | 18             | 470            | 470 4    | 4660   | 450   | 0.00      | 420 | -   |        |     |           |       |            |       | To FI         |            | MEO                    |                             |                |        |      |       |     |     | 2   | 3 4<br>4 1 | 17   | 9-8-  | 460 | 465   | 19  | 455  | 430  | 0.0       | l               | _     |                  |   |       |      |            |
| MED        |           |       |                            |       |       |              | E 2   | 217 2   | 278 3  | 316 3  | 338 3          | 348            | 352      | 348    | 340   | 318       | 288 | 234 | 255    |     |           |       |            |       | \$<br>E       |            | CNT                    |                             |                |        |      |       |     | n   | 213 | 275        | 310  | 330   | 344 | 349   | 344 | 335  | 315  | 3 282     | 32 234<br>22 18 | 34    |                  |   |       |      |            |
| ME0<br>CN7 |           |       |                            |       |       |              | 13    | 27      | 27     | 107 1  | 106 1          | 26 1           | 106      | 106    | 108   | 108       | 110 | 114 | m<br>~ |     |           |       |            |       | - <u>'</u> -E | ш          | MED                    |                             |                |        |      |       |     | E 4 | 118 | 109        | 107  | 107   | 106 | 107   | 106 | 109  | 109  | 9 111     | 11 112          | 13    |                  |   |       |      |            |
| MED        | u .       | w     | 10                         | 15    | 10    | 18           | 9 7   | 3 5 5 E |        | 2      | C              | 9              | 30       | 0,     | 30    | 25        | 30  | 26  | 2 5 5  | 3.8 | 30 %      | 30    | 45 10      | 4.5   | 10 Es         |            | MED                    | 24                          | 23             | 30     | 308  | 24 29 | 28  | 22  | 2.0 | 19 28      | 29   | 2 9   | 30  | 21 29 | 300 | 30   | 3 30 | 2 31      |                 | 25 3  | 32 2 2 2 2 2 2 2 | 27 28                                   | 30    | 30   | 29         |









71.3°N, 156.8°W

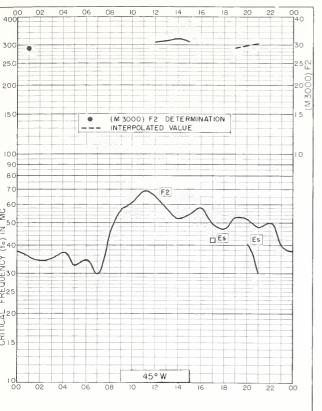


Fig. 5. GODHAVN, GREENLAND 69.3°N, 53.5°W NOVEMBER 1960

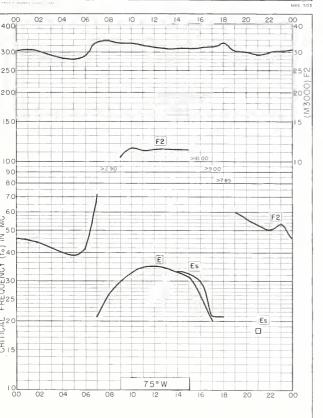


Fig. 7. GRAND BAHAMA I. 26.6°N, 78.2°W NOVEMBER 1960

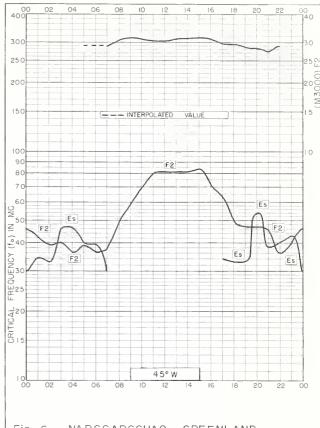
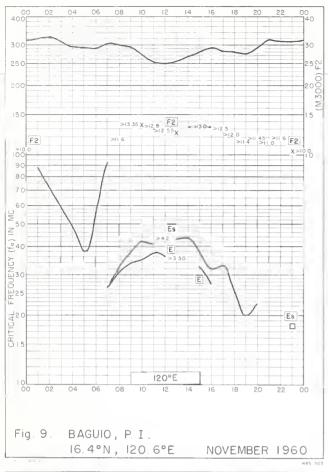


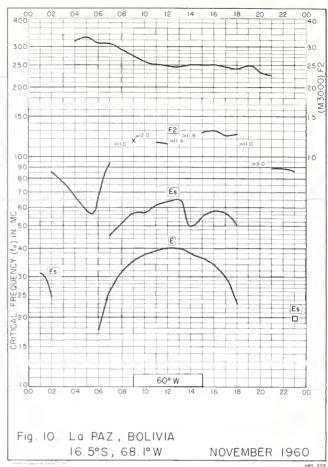
Fig. 6. NARSSARSSUAQ, GREENLAND 61.2°N, 45.4°W NOVEMBER 1960

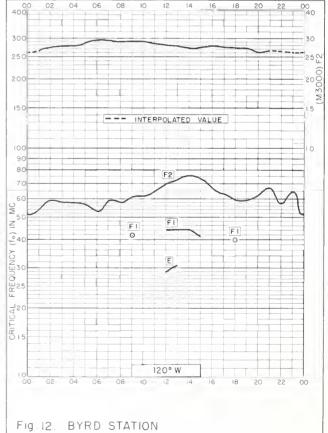


20.8°N, 156.5°W









80.0°S, 120.0°W

N85 51 3



Fig. 13. POINT BARROW, ALASKA
71.3°N, 156.8°W OCTOBER 1960

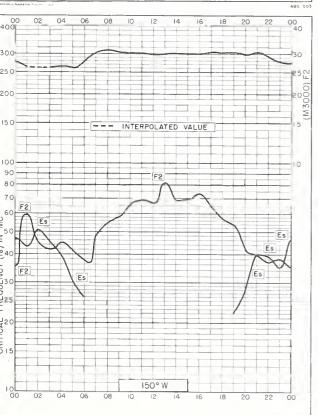
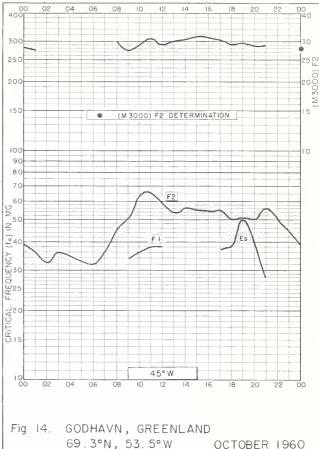
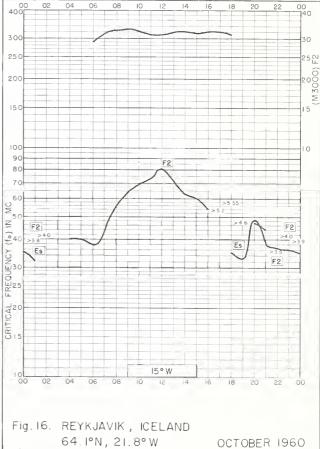


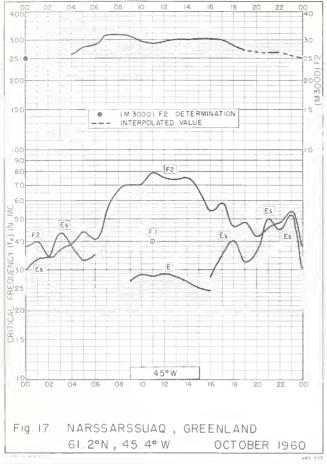
Fig. 15. FAIRBANKS, ALASKA 64.9°N, 147.8°W OCTOBER 1960

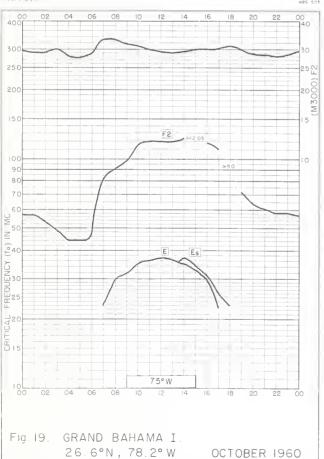




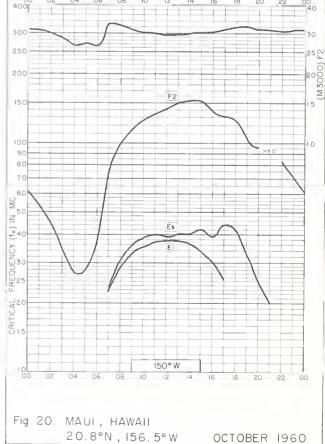
IBC 603

TODER TOO









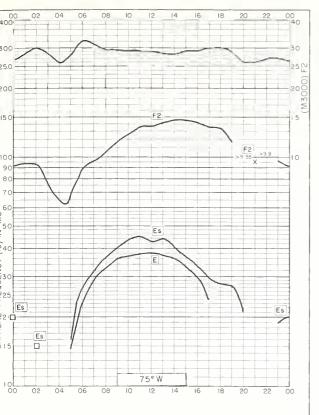


Fig. 21. CONCEPCION, CHILE 36.6°S, 73.0°W OCTOBER 1960

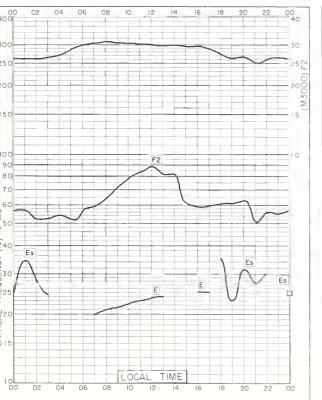
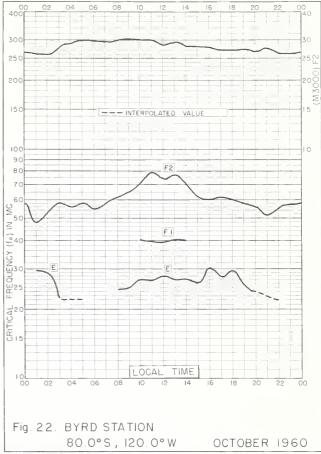
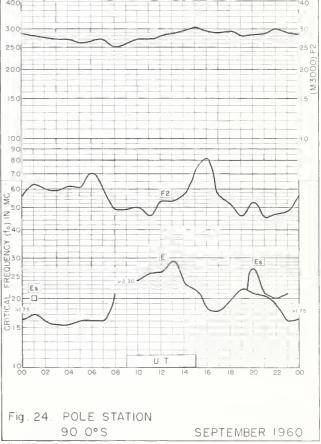
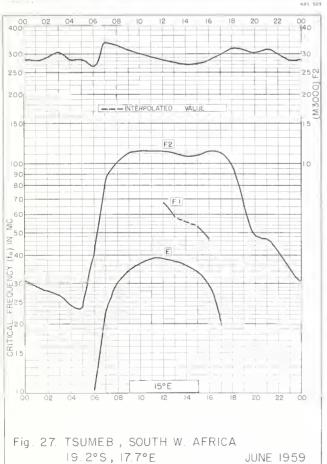


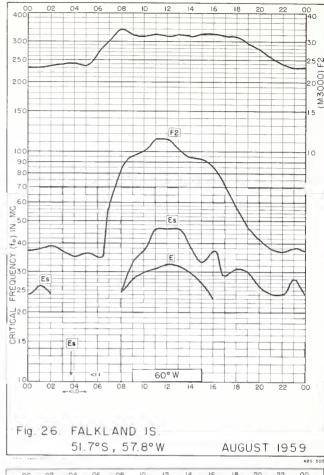
Fig. 23. BYRD STATION 80.0°S,120.0°W SEPTEMBER 1960

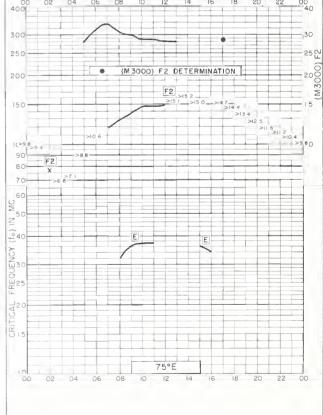












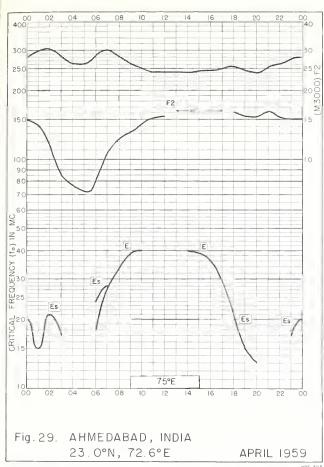
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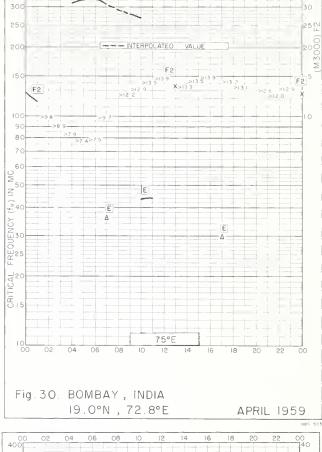
Fig. 28. DELHI, INDIA

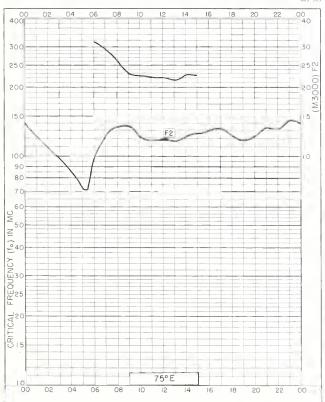
28.6°N,77.2°E

NBS 503

**APRIL 1959** 







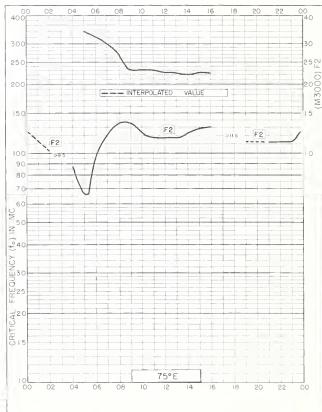
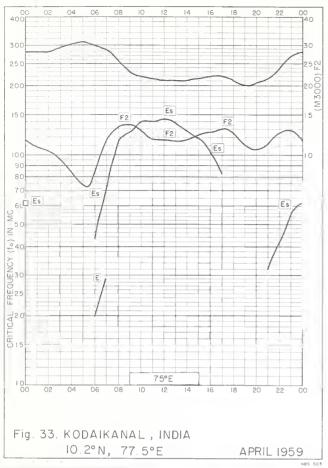
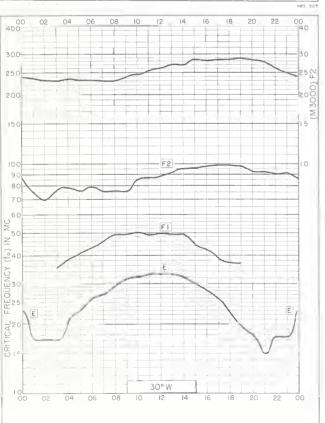


Fig. 31. MADRAS, INDIA 13.1°N, 80.3°E APRIL 1959

Fig. 32. TIRUCHY, INDIA 10.8°N, 78.7°E

APRIL 1959

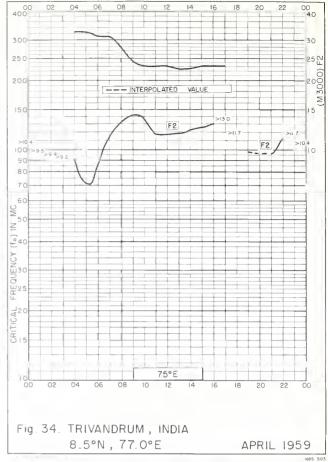


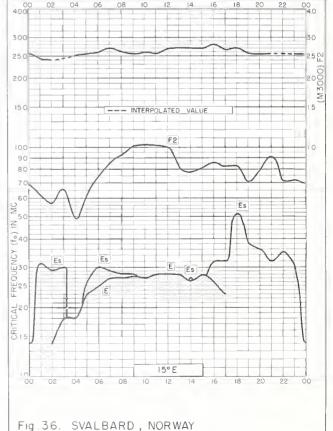


HALLEY BAY

75.5°S, 26.6°W

Fig. 35.

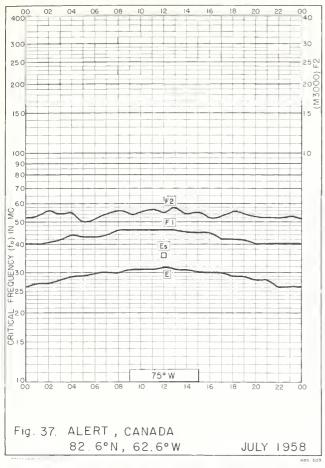


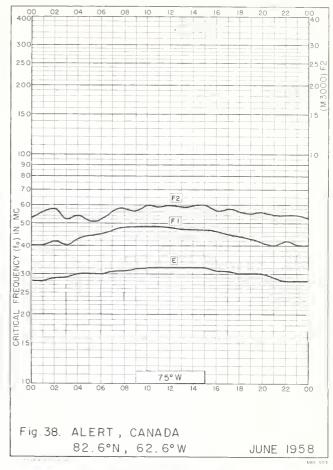


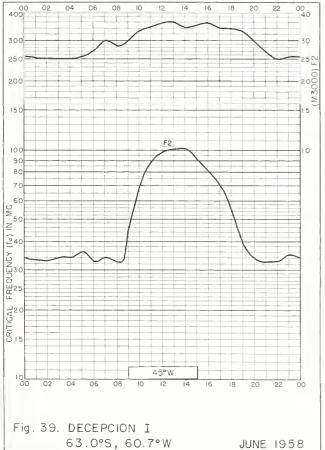
78.2°N, 15.7°E

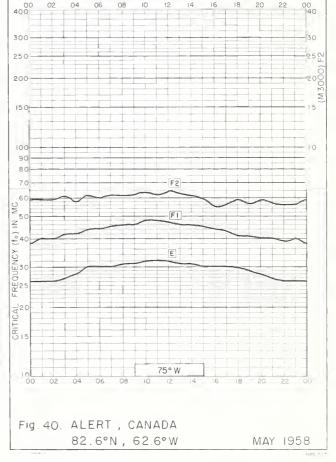
SEPTEMBER 1958

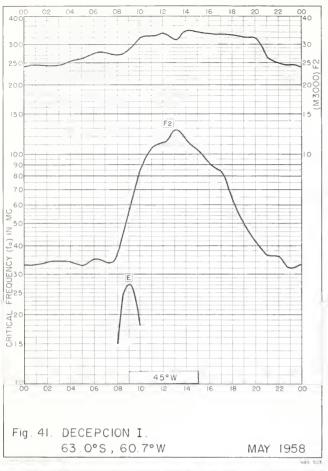
OCTOBER 1958

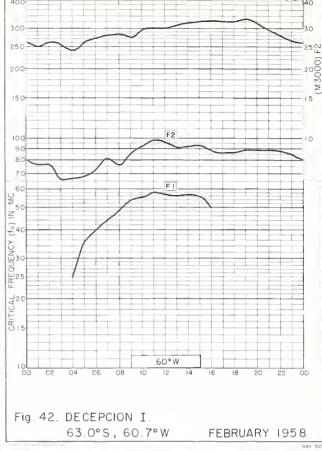


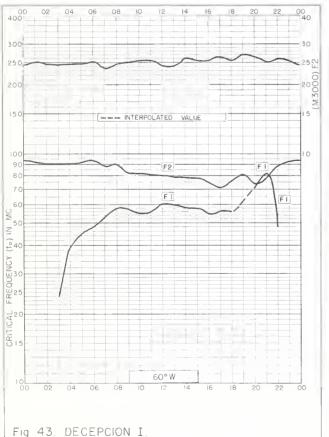












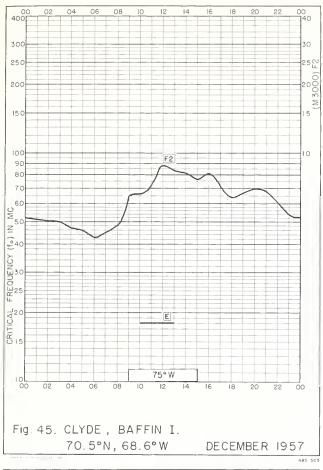
63.0°S, 60.7°W

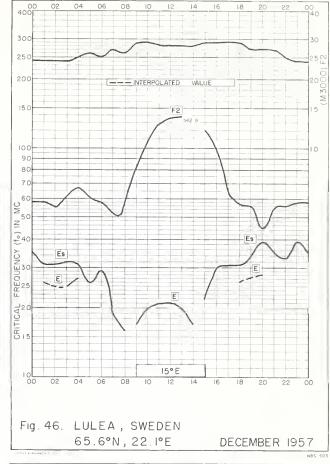


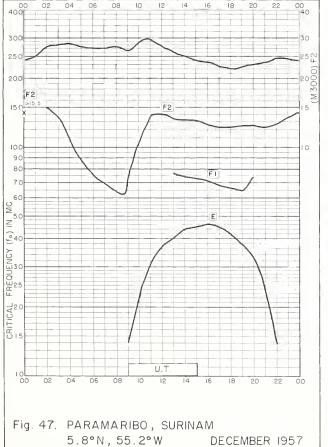
JANUARY 1958

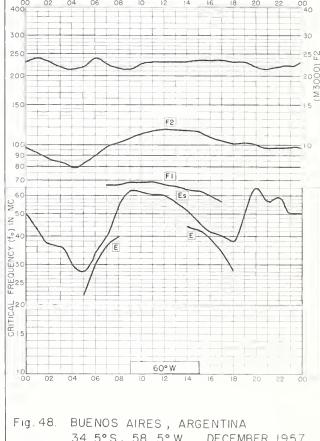
OLINDLII IOO

NBS 503

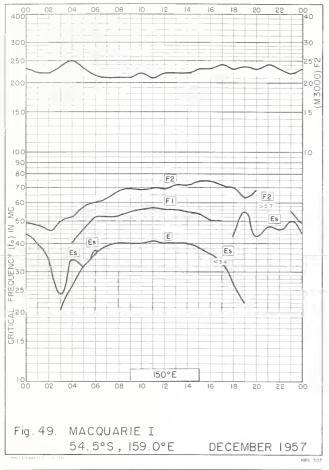


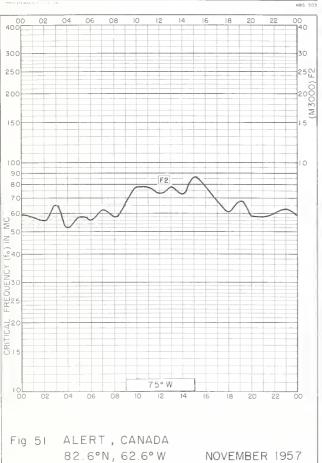






34.5°S, 58.5°W DECEMBER 1957





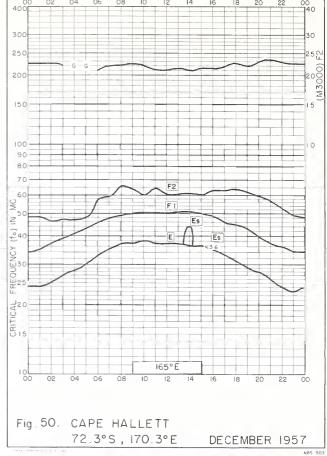
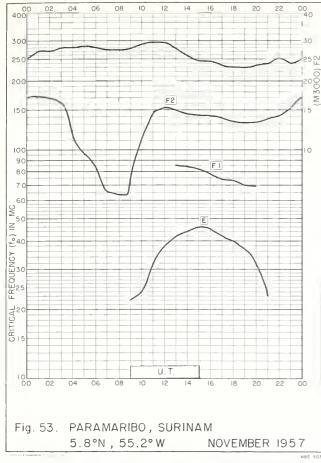
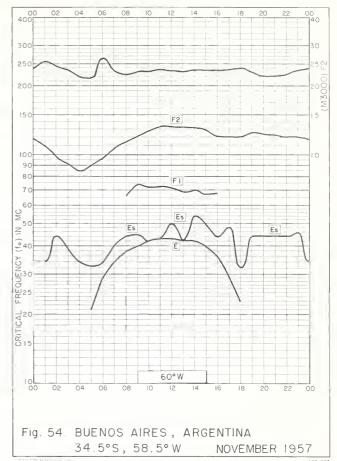


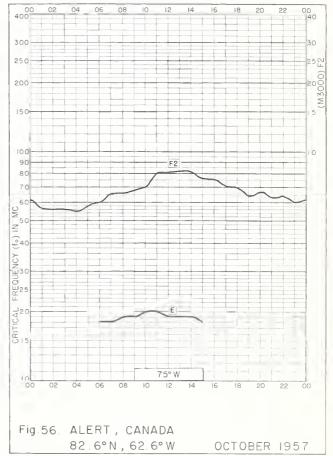


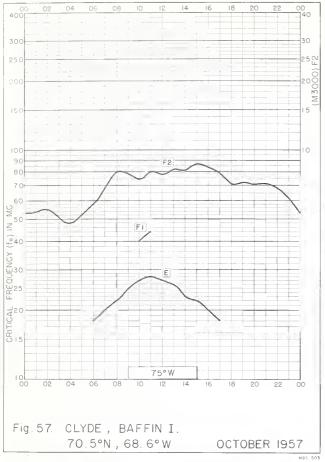
Fig. 52. CLYDE, BAFFIN I. 70.5°N,68.6°W

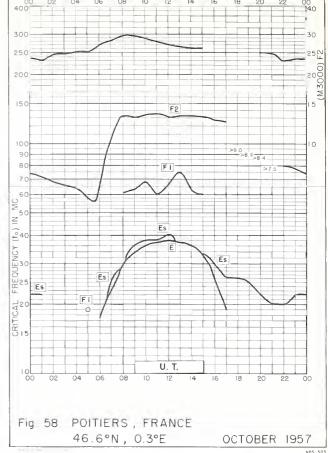


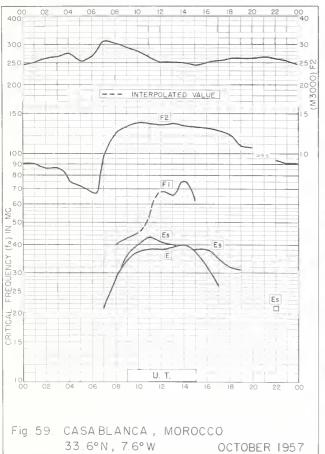








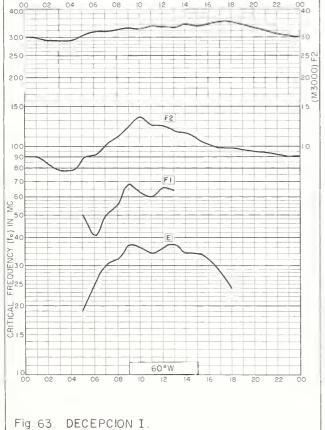






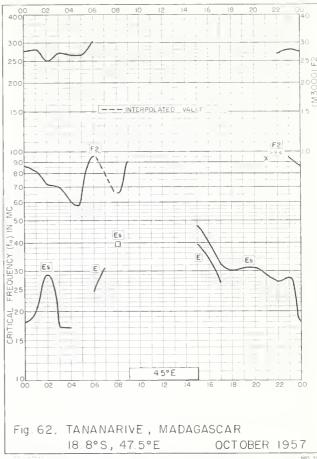
OCTOBER 1957

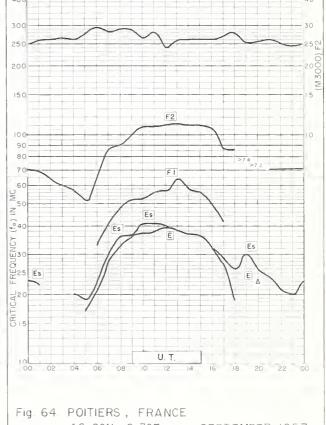




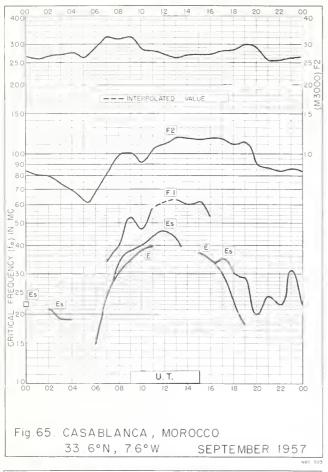
63.0°S, 60.7°W

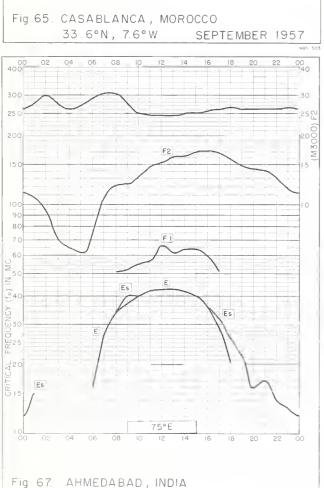
OCTOBER 1957





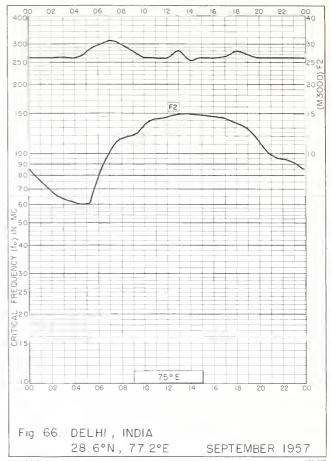
46.6°N, 0.3°E SEPTEMBER 1957

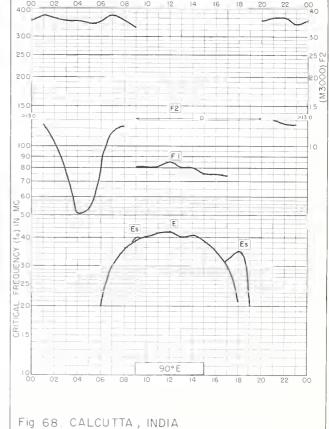




23.0°N, 72.6°E

SEPTEMBER 1957





23.0°N, 88.6°E

SEPTEMBER 1957

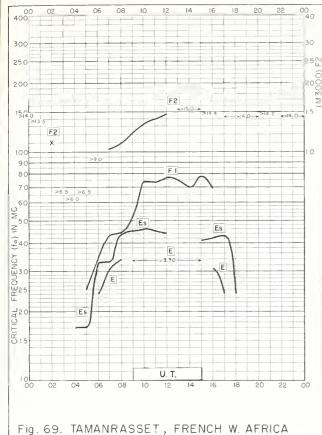
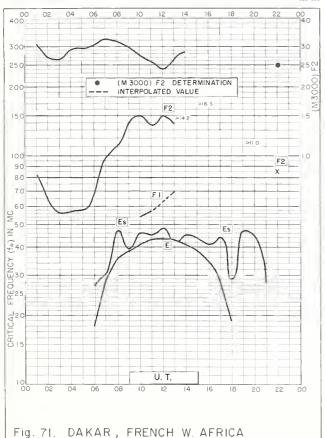
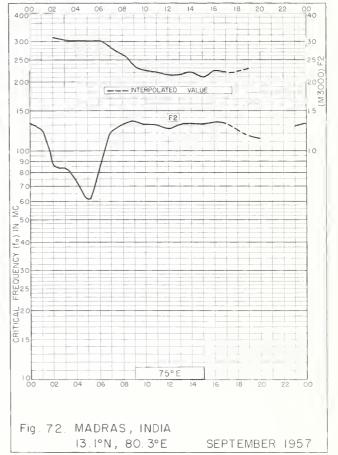


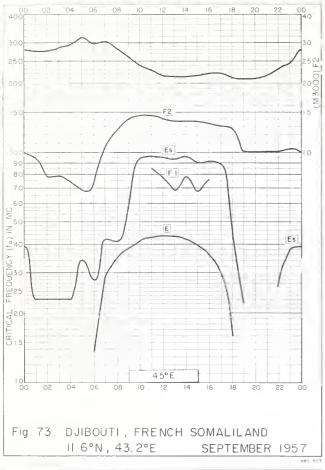
Fig. 69. TAMANRASSET, FRENCH W. AFRICA 22.8°N, 5.5°E SEPTEMBER 1957



ig. 71. DAKAR, FRENCH W. AFRICA
14.8°N, 17.4°W SEPTEMBER 1957







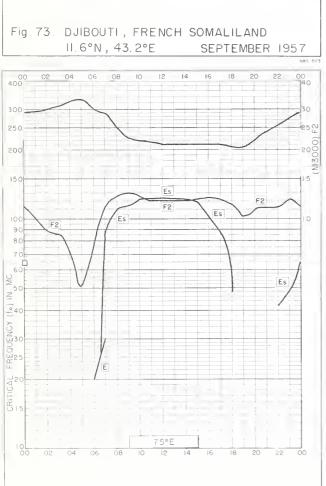
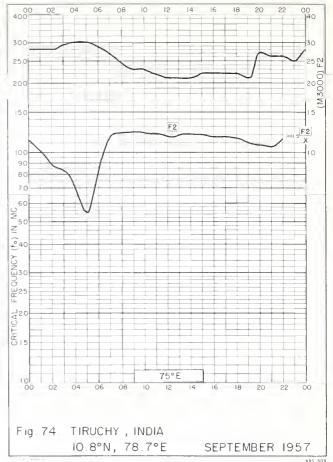


Fig. 75. KODAIKANAL, INDIA

10.2°N, 77.5°E



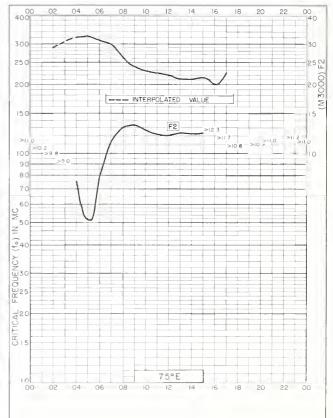
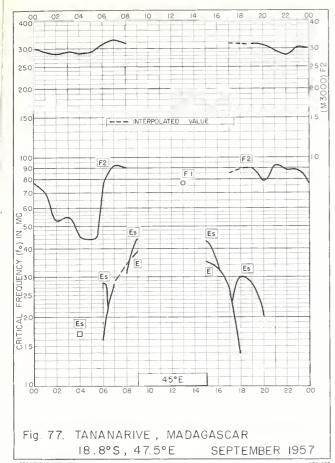


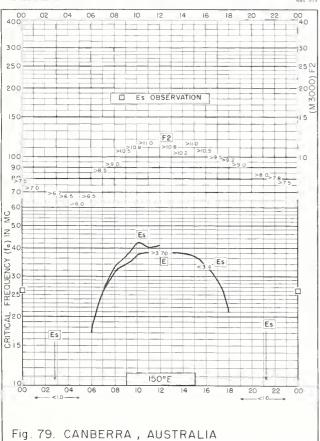
Fig. 76. TRIVANDRUM, INDIA

8.5°N, 77.0°E

SEPTEMBER 1957

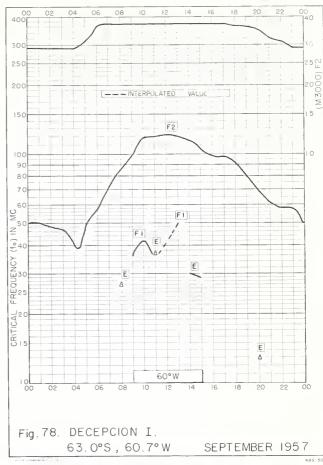
SEPTEMBER 1957

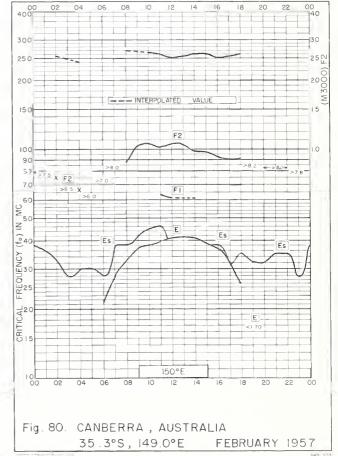


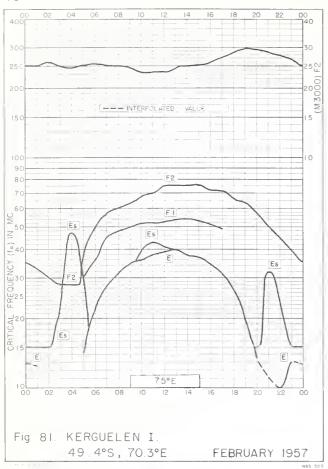


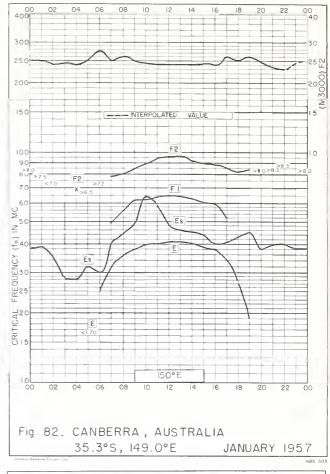
35.3°S, 149.0°E

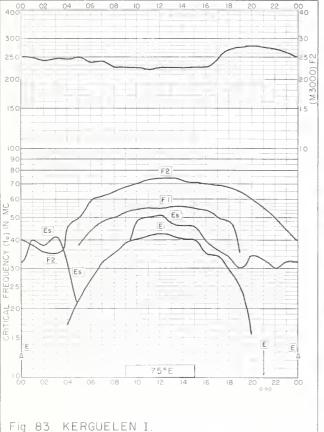
**MARCH 1957** 

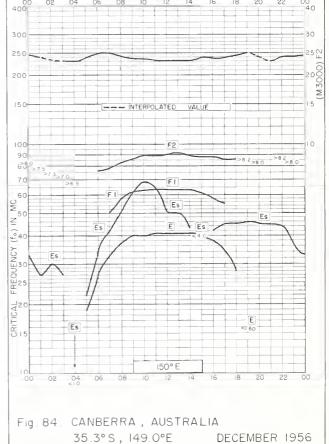






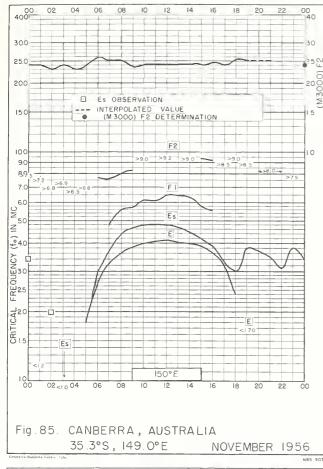


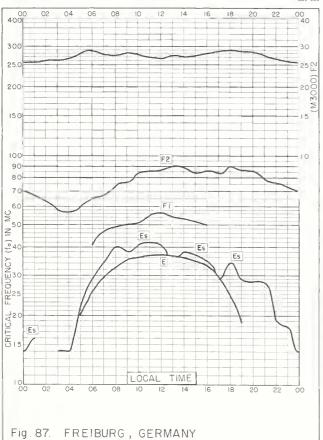




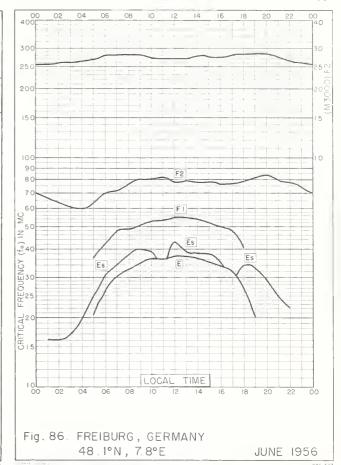
49.4°S, 70.3°E JANUARY 1957

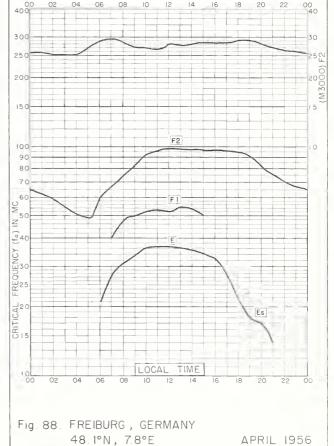
-11 1300





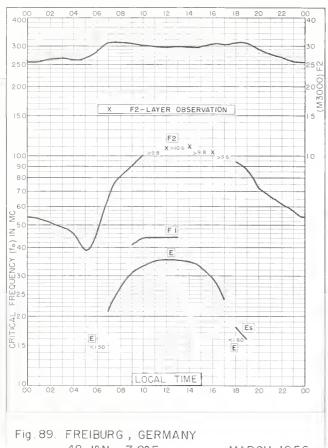
48. I°N, 7.8°E





MAY 1956

NBS 50





MARCH 1956



Fig. 91. FREIBURG, GERMANY

48.1°N, 7.8°E

JANUARY 1956

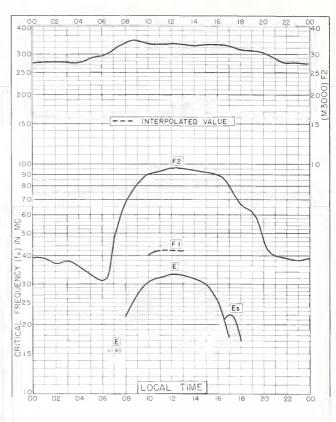


Fig. 90. FREIBURG, GERMANY 48.1°N, 7.8°E

FERUARY 1956

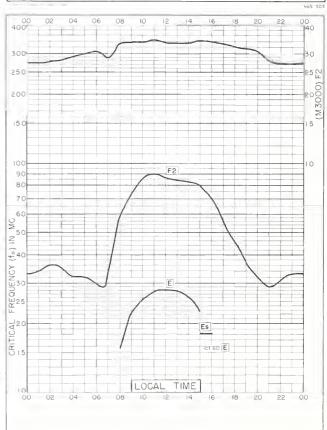
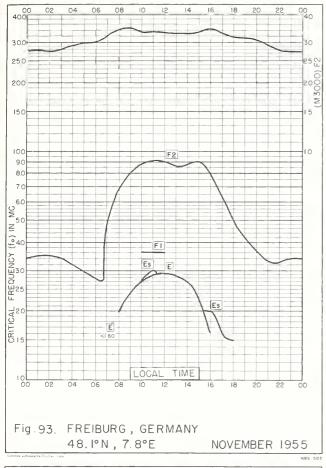
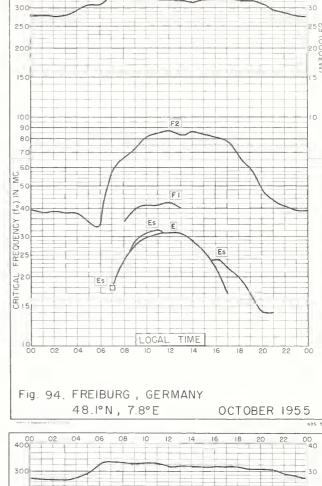
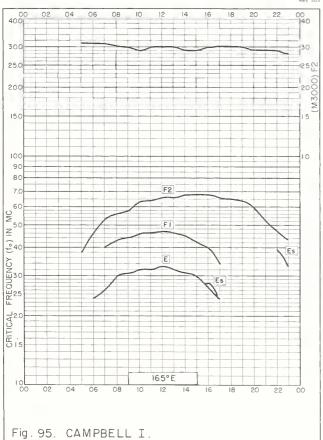


Fig. 92. FREIBURG, GERMANY 48.1°N, 7.8°E

DECEMBER 1955

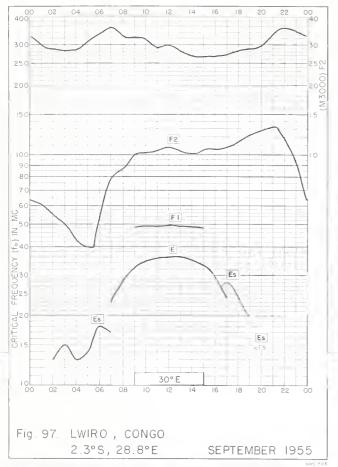


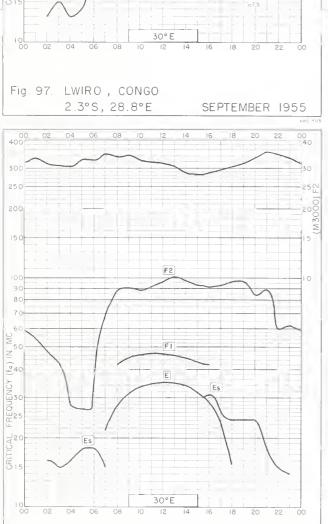


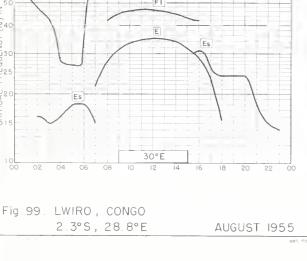


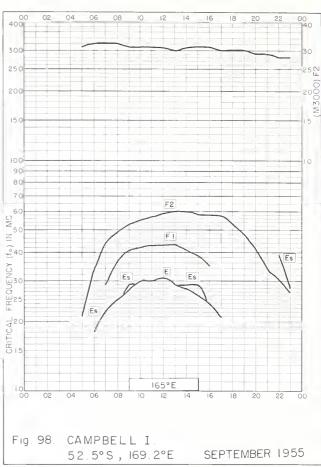
52.5°S, 169.2°E

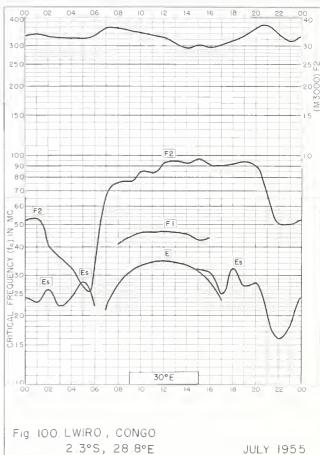
OCTOBER 1955











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| Ahmedabad, India     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| April 1959           |   |   |   |   |   |   | ٠ |   |   |   |   |   |   |   |   |   | , |   |   |   | ٠ | 8           | 33          |
| September 1957       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 17          | 42          |
| Alert, Canada        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| July 1958            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10          | 35          |
| June 1958            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10          | 35          |
| May 1958             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10          | 35          |
| December 1957        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 11          | 36          |
| November 1957        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13          | 38          |
| October 1957 .       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 14          | 39          |
| Anchorage, Alaska    | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |   | • | • | ۰ | • | <b>1</b> -7 | 37          |
| September 1961       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1           | 26          |
| Baguio, P. I.        | ۰ | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |   | • | • | • | • | -           | 20          |
| November 1960        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3           | 28          |
| Bombay, India        | • | • | • | • | • | ٠ | • | • | • | • | • | • | • | • | • | • |   | • | • | • | • | 5           | 20          |
| • •                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8           | 33          |
| April 1959           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| September 1957       | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |   | • | • | ٠ | ٠ | 18          | 43          |
| Boulder, Colorado    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | _           | 20          |
| October 1960 .       |   |   |   | • | • | • | • | • | • | ٠ | ٠ | • | • | • | ٠ | • |   | • | • | • | ٠ | 5           | 30          |
| Buenos Aires, Argent |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | -           | 0.7         |
| December 1957.       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12          | 37          |
| November 1957.       | • | • | • | ٠ | • | • | ۰ | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 14          | 39          |
| Byrd Station         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | _           |             |
| November 1960        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3           | 28          |
| October 1960.        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6           | 31          |
| September 1960       | • | • | • | • | • | • | • | • | ٠ | • | • | • | • | • | • |   |   | • | • | • | • | 6           | 31          |
| Calcutta, India      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| September 1957       | • | • | • | • | • |   |   | • | • | • | • | • | • | • |   |   |   | • | • |   | • | 17          | 42          |
| Campbell I.          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| October 1955 .       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 24          | 49          |
| September 1955       | • | • | • |   | • |   |   |   |   |   |   |   |   |   |   | • |   | • |   |   |   | 25          | 50          |
| Canberra, Australia  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| March 1957           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 20          | 45          |
| February 1957.       |   |   |   |   |   |   |   |   |   |   |   | • |   |   |   |   |   | • |   |   |   | 20          | 45          |
| January 1957 .       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 21          | 46          |
| December 1956        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | • |   |   |   | 21          | 46          |
|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 22          | 47          |
| Cape Hallett         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| December 1957        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13          | 38          |
| Casablanca, Morocco  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |             |
| October 1957 .       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 15          | 40          |
| September 1957       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 17          | 42          |
| Clyde, Baffin I.     |   |   |   | • |   |   |   | • |   |   |   | · | • |   | • | • |   |   |   | - | - |             |             |
| December 1957        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12          | 37          |
| November 1957        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13          | 38          |
| October 1957 .       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 15          | 40          |
|                      |   |   |   | • | • |   | • |   |   |   | • | • | • | • | • | • |   |   |   | - | , | 20          | . 0         |

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| January 1958                |            |             |
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